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PHYSICAL AND CHEMICAL METHODS

BY

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ıe main object of the oceanographic work the Swedish Deep Sea Expedition was, by lecting and analysing samples, to study the ıatorial current systems in the three oceans l the water layers close to the ocean floor. e stations with serial observations are shown the survey cart where they are given the lective name Hydrography. The first part the route from Sweden to Martinique, when complete measurements were made, is itted from the chart. In all, about 150 drographic stations were established. They re about 100 miles apart in the sections oss the equatorial currents. As our work l to fit into the general programme the uirement that the sections should be in a ridional direction could not always be filled. Thus a zig-zag course was laid out in Pacific, including four sections across the rent system. The equatorial sections in the ee oceans are shown in Table 1.

In the Indian and Atlantic Ocean deep ter was the chief object of hydrographic erest particularly the water layers close to bottom, with a view to studying the ysical-chemical processes taking place near ocean floor.

Besides these aims of the hydrographic work we tried to make the most of the opportunity for collecting new information on the oceanic water layers by means of serial observations, supplemented by occasional series taken in coastal waters. Thus sections were run through the Straits of Gibraltar, through the Straits of Bab el Mandeb, and off the Nile delta.

The routine observations included temperature, salinity, particle content, pH, alkalinity, oxygen, phosphate, and silicate. The usual technique for serial observations was used. As a rule, these observations were limited to depths of less than 1,000 m in the equatorial currents. At intervals, the series were extended to deep water, in particular at the Equator and in deep basins. The greatest depth for a complete set of observations was 8,175 m in the Mindanao Trench (Station 162).

As methods previously used for taking samples near the bottom were laborius we found it worth while to develop a new technique. By succesful team work a new procedure was evolved and used to great advantage in the Indian Ocean and in the Atlantic Ocean. By this method, which is described below, it was possible to take water samples simultaneously from previously decided levels close to the bottom.

TABLE 1. Oceanographic Sections.

	Stations	Route
acific Ocean	55—80	2° 44′ S, 92° 45′ W—17° 46′ N, 126° 51′ W
	80—94	17° 46′ N, 126° 51′ W— 3° 00′ S, 136° 26′ W
	105—123	7° 38′ S, 152° 53′ W—15° 14′ N, 152° 49′ W
	126—138	14° 39′ N, 164° 50′ W— 2° 37′ S, 177° 45′ W
ndian Ocean	200—208	11° 01′ S, 88° 26′ E — 1° 56′ N, 88° 12′ E
tlantic Ocean	325—337	15° 53′ N, 25° 27′ W— 0° 03′ S, 18° 13′ W

The methods used in our work are described below. On the whole we have followed the routine scheme on board research vessels. In so far as our methods deviate from the standard methods they are more closely described and, the improvements achieved are pointed out. We have tried to give all information essential for a critical examination of the results.

Staff

All the work connected with the collecting of water samples and with temperature observations was carried out by Koczy and Jerlov. As their time was also devoted to other branches of physical oceanography such as echo-sounding and measurements of transparency and subsurface radiation, the computation of temperatures and depths of sampling could not always be brought to the desired state of completion on board.

The chemical analyses were made by Bruneau who also drew off the samples. The work soon proved to be too great a burden for one man. Later on the physician, J. Eriksson, who fortunately was not heavily burdened by his duties, undertook the determinations of oxygen. Bruneau, who was called back to Sweden in May, 1948, during the concluding cruise in the Atlantic, was replaced by another trained chemist, N. Karlsson.

The whole scientific staff participated in the continuous surface observations and in the taking of bathythermograms when the vessel crossed the equatorial currents. The assistant geologist, R. Pettersson, performed a considerable part of the clerical work during the expedition.

The ship's crew only occasionally assisted with the experiments.

Water Bottles

For water sampling we used the Knudsen, reversing bottle. This type of bottle, 1,200 ml closes on reversal by means of plates seated in rubber. Being simple as well as robust, t bottles satisfies the demands of a routi device and it served its purpose satisfactori in our serial work. Occasionally the botto valve did not close. but even then the bott practically always reversed, so that at least temperature measurement was obtained.

The bottles were coated inside with ceres in order to avoid contamination of the enclos water. This is essential for the Tyndall measur ments, and the coating serves also to preve an absorption of oxygen by the metallic part (KNUDSEN, 1923, HAMAKER, 1941).

When taking water samples for radio-acti measurements another water bottle holdi 25 L was used. This bottle was not provid with a thermometer and was attached to t end of a wire.

Serial Observations

During the serial observations the vessel w manoeuvred so as to keep the serial winch the windward. The ship's engine kept h

Fig. 1. View of the oceanographic winch.

Fig. 2. Sunset in the doldrums.

ose to the wind in order to counteract both nd and current and thus keep the wire rope rtical. Special care was taken to prevent the re from getting below the ship. The wire gle was generally not allowed to exceed 20°. Samples in the uppermost layers were usually ken only at surface, 25, and 50 m, and below at at the standard depths internationally lopted. The shallow water bottle series was generally extended to 1,000 m which involved the use of 13 or 14 bottles. At most 15 bottles were attached on a single cast. After the bottles had been lowered to their depths we waited 10 minutes for temperature equilibrium, and then the reversing messenger was released. It travelled about 200 m per minute with the wire vertical. The collection of samples from surface to 1,000 m was generally accomplished in an hour.

After being brought up, the bottles were placed on a rack and the thermometer frames in a glass container with water which had been mounted near the laboratory entrance. The thermometers were read after an hour at the earliest when they had attained equilibrium.

When drawing off samples for different analyses we clamped the bottle above a small table mounted on the skylight near the laboratory entrance (Fig. 3). The samples were drawn off in the following order: pH, Tyndall, oxygen, alkalinity + phosphate + silicate, and salinity. The pH measurement was carried out immediately at the table.

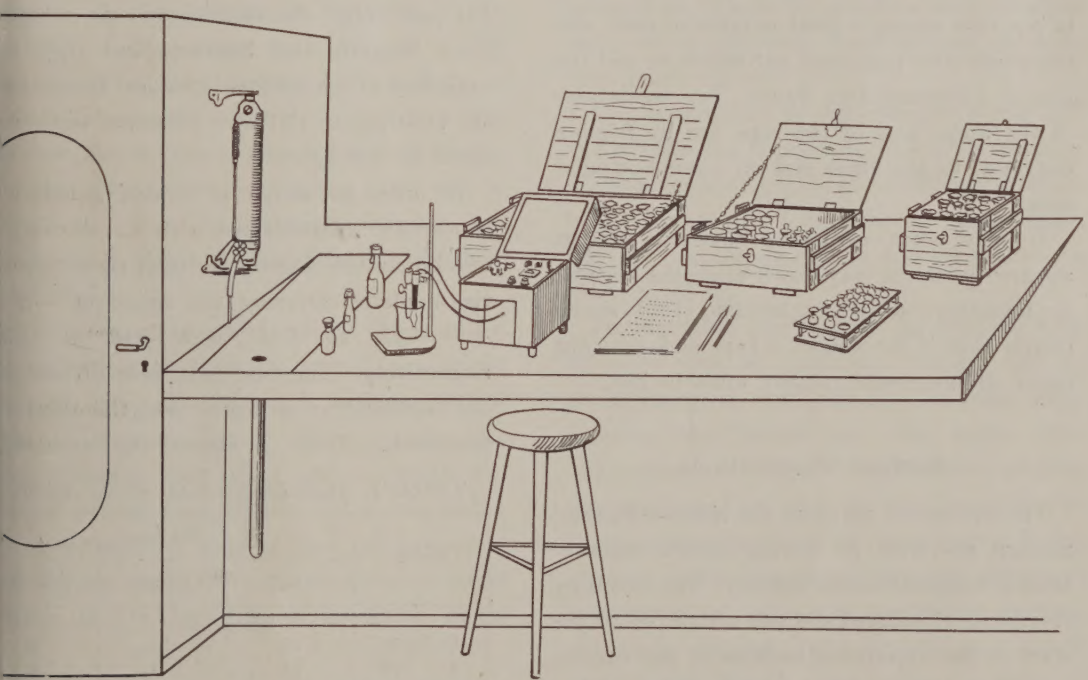


Fig. 3. The deck table where samples were drawn off.

Serial Observations near the Bottom

As mentioned above, a new procedure of taking water samples near the bottom was developed and used during the expedition. A bottle series is lowered down to fixed levels above the bottom. A stray weight of 60 kg is attached to the end of the wire rope, which is 4 mm in diameter and weighs 0.06 kg/m in water. The meter wheel is suspended from a dynamometer which is mounted on the winch davit and records the strain on the wire rope. The lowering is continued till the end weight reaches the bottom, when the strain is suddenly reduced. Then the winch operator tries to keep the weight at a distance of 1 m above the bottom. While the messenger is travelling all the way to the first water bottle, the distance is now and then checked. As a rule, 8 water bottles were attached on the deep cast, at distances of 3, 9, 15, 25, 50, 150, 300 and 500 m from the weight. Thus, the lowest bottle was kept 4 m from the bottom.

The significant decrease in strain is readily observed though sometimes obscured by fluctuations due to the rolling of the vessel. Only in one case among a great number of casts was too much wire rope paid out which caused the loss of a thermometer frame. The oscillations of the upper end of the rope are by friction conveyed to the lower end on a much smaller scale.

It may seem surprising that the weight apparently moves very slowly along the bottom. An investigation by KULLENBERG (1951) shows clearly that if the weight is kept at a constant depth its horizontal velocity must be low.

Surface Observations

The equipment on board the *Albatross* lacked modern resources for taking surface observations of temperature and salinity. The recording thermometer ordered did not arrive before the start of the expedition because of the stop in industry in England in the spring of 1947. We were compelled to take surface samples by bucket method. This was done every h under way across the equatorial currents.

Bathytermograph

Two bathythermographs for 450 feet w used. They were delivered by Woods H Oceanographic Institution which, when expedition arrived at Honolulu, kindly pla at our disposal another device for 900 f Unfortunately this had been damaged transport and did not function properly.

The bathythermograph was operated most stations and in addition every fou hour (20—30 miles) between stations in equatorial sections. The slides were treated the ordinary way. After the expedition t were photographed together with the scale made into enlarged thermograms.

Protected Reversing Thermometers

Thermometers of the well-known patt manufactured by Richter and Wiese, used the *Meteor*, the *Snellius*, and by the *Carneg* were not available in the post war ye 1945/46. Our thermometers were obtai from Negretti and Zambra, and they w examined at the National Physical Laborato at Teddington (NPL). Pressure tests w made for 800 kg/cm².

In order to arrive at a determination subsurface temperatures with an accuracy one hundredth degree, we used three types thermometer covering the range of −2° +8°, +3° to +13°, and +10° to +3 respectively. The first two were divided i one-twentieth of a degree and the third i one-tenth. Table 2 shows the number

TABLE 2. Thermometers used on the *Albatross*

Range	Number		
	total	in use	out of ord
10° to 30°	22	10	0
3° 13°	12	9	2
−2° 8°	18	17	4

ermometers which were broken or got out order during the experiments.

The one-tenth thermometers were read to .01, the others to 0°.005 by means of a agnifier.

The corrections for the temperature *in situ* ere determined by means of a simple graphical ethod described by THEISEN (1946) who also ndly supplied us with the necessary diagrams. he sum of reduction correction and NPL rrection is directly derived from the diagrams 0°.001.

With regard to the sources of error we refer the experience of the *Meteor* and the *Carnegie*. he error of reading is in the first place affected y the thickness of the glass capillary. It is ssumed to be higher than 0°.005 attaining alues of 0°.01. As the NPL test points are ten 3° apart, accuracy may be assumed to e within the limits ±0°.01.

The re-examination of the thermometers ter the expedition was obstructed by a istake of the Swedish agent of Negretti and ambra. BÖHNECKE (1927) states that the mplitude of the change of the zero point mounts on the average in the case of the ne-tenth thermometers to 0°.02 and in the se of the one-twentieth thermometers to °.015. The manufacturers of our thermometers, owever, assert that the error does not exceed °.01 as they were artificially aged and a nsiderable time had elapsed between the mpletion of the thermometers and their libration.

The accuracy of the corrected temperature ay be estimated through the usual comparison etween thermometers used together. Of 9 irs of thermometers 6 show a mean difrence smaller than 0°.02, and 4 a mean difrence smaller than 0°.005. In a long series observations a pair of one one-twentieth nd one one-tenth thermometer on an average eviate 0°.006, the highest deviation being °.033.

The comparison between thermometers made it possible to find systematic errors, sometimes with the aid of T-S diagrams. For some thermometers the corrections have been applied to the readings.

Unprotected Thermometers and Thermometric Determination of Depth

At the start of the expedition we had at our disposal the following unprotected reversing thermometers from Negretti and Zambra and examined at NPL.

7 thermometers, range 0—30° C divided to 1/10°

6 thermometers, range 0—60° C divided to 1/5°.

Three of the 30° type and two of the 60° type were damaged during the serial observations. The design of these unprotected thermometers is open to some criticism and slight improvements have been suggested to Negretti and Zambra.

The correction to be applied to the reading of the unprotected thermometer is found from the Meteor Diagram (SCHUMACHER 1933). The error of one single temperature determination with the unprotected thermometers is, as a rule, smaller than 0°.08.

The uncertainty in the pressure factor and in the difference between the corrected readings of the unprotected and protected thermometers led to an error of the thermometric depth which is on an average 5 m and seldom as much as 15 m.

During serial observations we tried to keep the wire rope in a vertical position and no great attention was paid to the relationship between wire length and wire angle. The interpolation between thermometric depths was performed by plotting wire length minus thermometric depth against wire length. Later, POLLAK (1950) has shown that this procedure is superior to the earlier method of plotting the ratio between wire length and depth against wire length. Generally, the error in

interpolated depth does not exceed 10 m but maximal deviations of 30 m are possible.

Owing to the very hard steel wire rope with only 4×3 strings the meter wheel was much abraded in the course of the work and at last showed the wire length 4 per cent too great.

Salinity

As the staff was far too small to carry out the extensive work of chlorinity titration we had to preserve water samples till after the expedition. The Meteor expedition showed that the determination of salinity may well be postponed, if necessary precautions are taken, the error being on an average only $0.002\,^0/_{00}$ Cl (WÜST 1932).

The samples were drawn off into bottles holding about 100 ml, which were closed by means of patent stoppers made of stainless steel (porcelain stoppers could not be procured in 1946). The filled bottles were sealed with melted paraffinwax. They were stored in wooden boxes containing 56 bottles each. Only a few bottles were broken during the journey.

The titration was carried out by 4 chemists in the Oceanographic Institute, Gothenburg. The Mohr-Knudsen method was used with innovations by the *Meteor* and with some alterations mentioned below. A half-automatic type of burette was used. It is made of normal glass as pyrex showed a disturbing effect on the surface tension. The scale on the burette ranging from 18 to 21 double ml (36 cm) is subdivided in 0.01 double ml, hence the reading could be made to 0.002 double ml.

The titration table was provided with two fluorescence lamps, one directly illuminating, the table and the beaker, and the other the white painted back panel. A magnetic stirrer mounted under the table produces without splashing, good mixing during precipitation.

In order to ascertain the second decimal in the salinity an increased Knudsen table was used giving the third decimal according to k-values also determined to the third decim All samples were double titrated. If the diffe ence exceeded $0.025\,^0/_{00}$ Cl a third titrati was added. As a rule, the mean value w accepted but, if the T—S diagram indicated discrepancy between temperature and salinit the salinity was corrected *within* the limits the titrations.

The titration work turned out to be mo tedious than was expected as most samples h to be titrated three times. The irregularitie which did not appear in recently collect samples from the North Sea, may be attribut to the long preservation at a temperature nearly 30° C. This led in some cases to a slig formation of rust on the part of the stopp that is not covered by the rubber washer. is, however, guaranteed that the salinity valu obtained are in good agreement with earl values at the same locality and that the requir accuracy of $0.02\,^0/_{00}$ salinity is practica always attained.

Density

The density of the water σ_t at the accept depths was obtained with the aid of Thorad tables. Only for the high-salinity water of t Red Sea was the density computed fr Knudsen's formulas.

Distilled Water

There is always the risk of distilled wa kept during a long journey in the tropics bei contaminated. We preferred to produce own distilled water on board using a distillat device for electric heating manufactured Siewerts Limited. As the automatic switch of mercury type the whole equipment v placed on a static table where it performed function during the expedition. Sea water v generally used for cooling. When fresh wa was rationed on board, which happened intervals, the distillation was fed with a m mum quantity of fresh water. A red lamp

e electric circuit made it possible for anyone control the device.

The water in the fresh water tank was casionally slightly contaminated by oil. It s therefore found advisable to check the ell of the distilled water before using it.

Hydrogen Ion Concentration

The hydrogen ion concentration, pH, was termined by means of a Beckman pH-meter odel G, with electrodes nos. 4970 and 4990. war beakers were used at the first stations t the change of pH in 50 ml water due to ing temperature soon proved to be negligible. e electrodes were cleaned by dipping them o water drawn off from the water bottle. en the beaker was refilled and the electrodes d the thermometer placed into it. The pH t was made after all samples had been drawn from the water bottle or after about 3 nutes. The pH-meter was standardized by otassium biphtalate buffer manufactured by e Marconi Corp. and holding a pH of 6.39.

In order to obtain the pH *in situ* the readings d to be corrected and attention paid to the llowing:

a) the temperature *in situ*,
b) the pressure *in situ*,
c) the error of the automatic temperature correction.

According to the investigations of Buch and Gripenberg (1932), and of Buch and Nynäs (939) pH *in situ* is found by the formula

$$\text{pH } in\ situ = pH_{t'} + x\,(t - t') + \frac{\xi D}{1000} + \delta\pi_{t_0}\,(t' - t_0)$$

ere t' = temperature of the sample during the measurement,

t_0 = temperature of sample during standardization,

t = temperature *in situ*,

D = depth in metres,

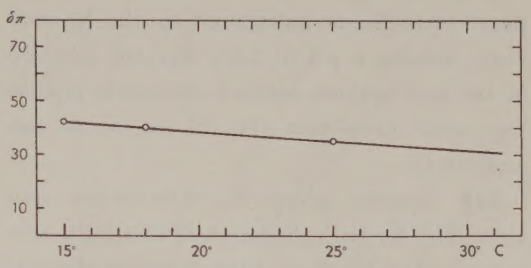


Fig. 4. The factor $\delta\pi$ for different temperatures at the standardization.

x = function of Cl, pH and t according to Buch and Nynäs,

$\delta\pi$ = function of pH and t_0 characteristic for the pH-meter in use,

ξ = function of pH according to Buch and Gripenberg.

The factors x and ξ are derived from Buch *et al.*, the third factor $\delta\pi$ was determined after the expedition by miss B. Eriksson at the Oceanographic Institute. It was found that $\delta\pi$ values for our pH-meter are not dependent on the pH but only on the temperature during the standardization (Fig. 4). The x-values were calculated for a salinity of 35 $^0/_{00}$ which affords sufficient accuracy. On the whole, the error in the pH determination is lower than 0.015 but in exceptional cases can attain a value of 0.03.

Alkalinity

Alkalinity, defined as the number of milliequivalents of hydrogen ion neutralized by one liter of sea water at 20° C, was determined by the method given by Andersson and Robinson (1946) using the principle outlined by Thompson *et al* (1931, 1940). It is the most rapid method. Without too much work the alkalinity of nearly all samples could be determined.

The pH measurements were made with a Beckman pH meter laboratory model G using electrodes nos. 4970 and 4990. The electrodes were standardized against a potassium bi-

phtalate buffer manufactured by the Marconi Corp, holding a pH of 3.99. For the addition of the hydrochloric acid an automatic pipette was used (Correction + 0.123 ml. at 25 ml. and 30° C).

The formula given by ANDERSSON and ROBINSON for the calculation of alkalinity does not consider the effect of the dissolved carbonic acid on the pH. This can be neglected if the pH obtained after addition of hydrochloric acid is within limits of 3.3 and 3.9. But as a great part of our measured samples show a pH above 4.0, we had to investigate the effect of the carbonic acid. The formula should also include $c_{HCO_3'}$ and is:

$$Alk = HCl - \frac{c_H f_H}{f_H} + c_{HCO_3'} \qquad (1)$$

The concentration of the bicarbonate ion is determined by the first ionisation constant and can be estimated by assuming proper values for salinity, temperature and CO_2-tension:

$$\frac{a_H \, c_{HCO_3'}}{c_{CO_2}} = K_{C_1} \qquad (2)$$

as $$c_{CO_2} = \Sigma CO_2 - c_{HCO_3'}$$

we get $$c_{HCO_3'} = \frac{\Sigma CO_2}{1 + \frac{c_H f_H}{K_{C_1}}} \qquad (3)$$

Assuming the specific alkalinity to be 0.123 (WATTENBERG 1933), the salinity to be on average 19.5 $^0/_{00}$ Cl, and a mean temperature during the measurements of 25° C, K_{C_1} can be

TABLE 3. Alkalinity correction due to HCO'_3.

pH	$c_{HCO'_3} \times 10^6$ at $\Sigma CO_2 = 1.25 \cdot 10^{-3}$ mol/L	$c_{HCO'_3} \times 10^6$ at $\Sigma CO_2 = 0.80 \cdot 10^{-3}$ mol/L
3.25	2.04	1.32
3.50	3.65	2.34
3.75	6.45	4.15
4.00	11.42	7.35
4.25	20.0	12.9
4.50	35.5	22.9
4.70	62.0	39.7

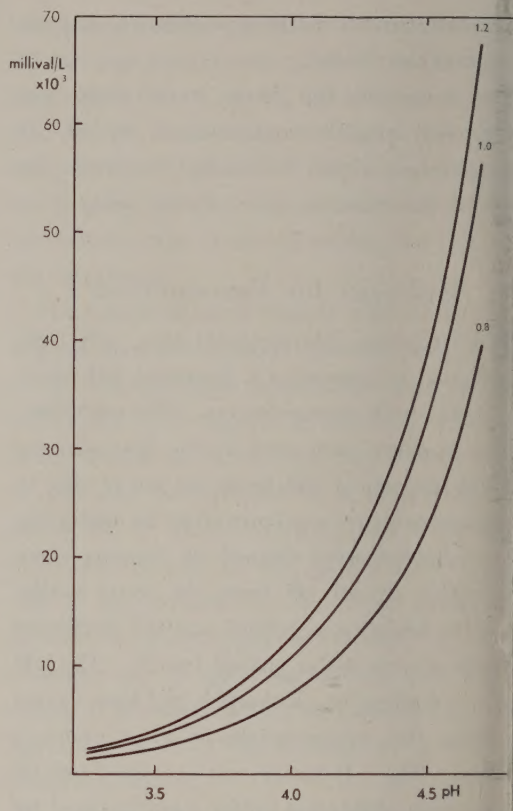
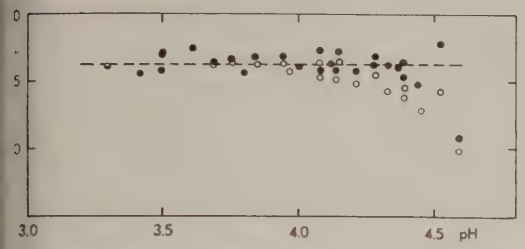


Fig. 5. Correction for alkalinity due to concentra of HCO'_3 at different pH and ΣCO_2 — values.

estimated at $10.6 \cdot 10^{-7}$ and ΣCO_2 to $1.6 \cdot 10$ These values are obtained by considering dilution effect of the 25 ml 0.01-n HCl, wh are added to the sample before measuring pH. The values of $c_{HCO_3'}$ at different pH-val are given in Table 3 and Fig. 5. By the addit of HCl a part of the dissolved CO_2 is libera and a lower value of ΣCO_2 must be assum In Table 3 values of $c_{HCO_3'}$ are given $\Sigma CO_2 = 1.25 \cdot 10^{-3}$ mol/L and $0.80 \cdot 1$ mol/L of which the last value seems to g the best results.

In order to redetermine the f_H values, alkalinities of two water samples were de mined by direct electrometrie titration. sample recently collected in the Skagerr Cl 19.15 $^0/_{00}$, and the same diluted to 17.23 $^0/_{00}$ were used. The bicarbonate conc tration having been computed by the use the above relations, the activity constant



. 6. The factor f_H shows small variations with the in the range pH = 3.3 to 4.3. Circles for ΣCO_2 = 1.25 filled circles for $\Sigma CO_2 = 0.93$.

s calculated from equation (1). In addition, was calculated for one of the samples, Cl .83 ‰, given by ANDERSSON and ROBINSON. e f_H values now show only small variations

BLE 4. Computed activity constant, f_H, at different pH. Three water samples.

pH	f_H	pH	f_H	pH	f_H
4.52	0.89	4.45	0.74	4.37	0.80
4.39	.82	4.39	.77	4.28	.81
4.28	.84	4.33	.81	4.195	.82
4.15	.86	4.21	.79	4.015	.79
4.08	.86	4.14	.79	3.81	.79
3.95	.84	4.08	.79	3.42	.77
3.84	.84	3.97	.79		
3.69	.82	3.85	.81		
3.50	.79	3.76	.83		
3.30	.80	3.61	.87		
		3.52	.85		
quivalent point pH = 4.63		equivalent point pH = 4.58		equivalent point pH ~ 4.5	

th the pH within the limits of pH 4.3 and (Table 4 and Fig. 6). As a mean value f_H 0.81 was found. At the equivalent point uation (1) is reduced to:

$$\frac{c_H f_H}{f_H} = \frac{\Sigma CO_2}{1 + \frac{c_H f_H}{K_{C_1}}}$$

suming the same values for the constants as bove and $\Sigma CO_2 = 1.0 \times 10^{-3}$ mvl/L, the uivalent point should occur at pH = 4.60. e equivalent point can be obtained easily d exactly by the first derivation of the titra- n curve. At our determinations the pH at equivalent point was determined to 4.58

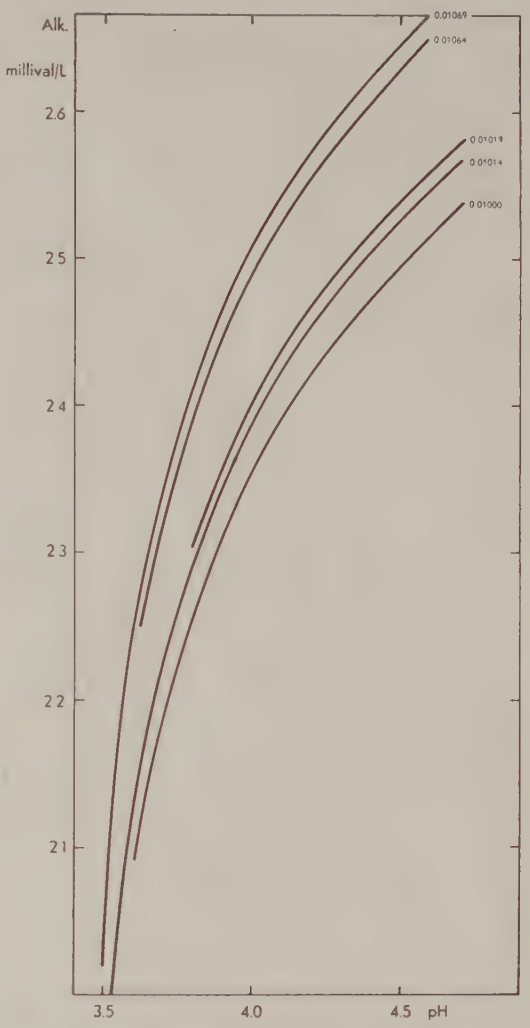


Fig. 7. Reading chart for alkalinity. Curves for different normalities of the hydrochloric acid.

and 4.63 showing the ΣCO_2 is lowered to about a half of the initial value.

For the calculation of the alkalinity a graph was used (Fig. 7). Each normality of the hydrochloric acid used during the expedition is represented by a curve from which the alkalinity could be read. Following the original description strictly we obtained very high pH values. The amount of hydrochloric acid added should be higher than 25 ml 0.00100-n HCl. During the first part of the cruise we were using 25.135 ml 0.0100-n HCl changing to 0.01069 which gives more satisfactory results, but during the last period of the expedition the

normality was only 0.01019 and 0.01014 which were a little too low. As Fig. 7 shows, the best values should be obtained using a 0.01050-n HCl.

The errors of the method have already been discussed and given by ANDERSSON and ROBINSON and it can be assumed that the error never exceeded one per cent *i. e.* 0.02 milliequivalent but is usually of the order of $\pm$ 0.01 milliequivalent.

Carbon Dioxide

The content of CO_2, given in ml/L, was computed from known values of alkalinity, pH (corrected), temperature, salinity and depth according to the formula given by BUCH, HARVEY, WATTENBERG, and GRIPENBERG (1932) and with BUCH's (1933) constants. The accuracy in determining the content of CO_2 is slightly affected by variations in temperature and salinity. The error in alkalinity gives the same percentage of error in the CO_2 content but the uncertainty in the pH determination is more important. At low pH values the error in the CO_2 content is relatively great and amounts to 0.03 ml/L at 25° C if the pH deviates 0.015 units from the value 7.70.. The corresponding value for pH = 8.4 is much smaller, or only 0.006 ml/L. At low temperatures the error is higher and amounts under the same conditions as the above to about double.

Oxygen

The sample was drawn off into glass-stoppered bottles with a capacity of about 125 ml. The stopper is ground off obliquely in order to prevent the inclusion of air bubbles when the bottle is closed. The bottle was placed in a glass cylinder with a piece of soft rubber at the bottom to prevent breakage, and filled to overflowing when the sample was drawn.

Solutions were added by means of special pipettes according to Bruneau (Fig. 8). These are constructed for two samples and to give the same speed of outflow for the two solutions.

Oxygen was determined according to Winkler's method as modified by KALLE (1939) and by POMEROY a. KIRSCHMAN (1945). The latter modification gives a higher iodide concentration. Sodium iodide, which is more soluble in sodium hydroxide, is used instead of potassium iodide. The sodium hydroxide concentration is reduced from 12.5 to 10 normal whereas the iodide concentration is increased from 0.9 to 6 normal. THERIAULT (1933) has shown that when working with the Winkler method iodine may be lost by evaporation. As the quantity of free iodine in the solution is determined by the iodide concentration according to

$$J^- + J_2 \rightleftarrows J_3^-$$

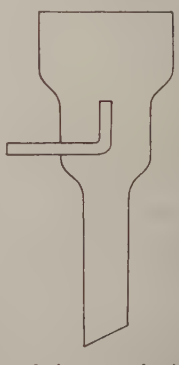
the iodine vapour is reduced to

Fig. 8. pipette f Winkle reagent

1/7 when the iodide concentration is increa 7 times according to POMEROY and KIRSCHM

Their procedure has another advantage that the final point of titration is more eas observed.

KALLE (1939) introduced the preservation the thiosulphate solution be means of isobut



Fif. 9. Rinsing funnel for transferring sample to titration beaker.

ohol. The solution prepared in this way kept ictically unchanged during the whole journey. The sample was transferred to the titration sk with the aid of a new contrivance invented Bruneau (Fig. 9). First the stopper was shed by the jet after which the bottle was ced upside down in the device and washed . When the bottle was taken away its lar was washed again. Burettes of Derona e holding 10 ml were used in the titration. teborgs Vattenverk kindly placed them at disposal.

Phosphate

Phosphate was determined by the molybdate thod as modified by WATTENBERG (1937) l with his correction for salt error. Turbidity s avoided by passing the sample through a mbraneous filter which removed all particles ve one μ. This filtration is normally easy l quick. Unfortunately the expedition had y a small supply of these filters. In consence they had to be used till the filtration e increased to 20 minutes for a sample. he comparison between the sample and blank placed in 30 cm glass tubes was de by means of a Pulfrich photometer with er S 72 (720 mμ).

Silicate

ilicate was determined by the molybdate hod as modified by WATTENBERG (1937). rection for salt error was also made according his method. Sodiumfluosilicate was used the preparation of the standard. The parison between the filtered sample and blank placed in 30 cm glass tubes was made means of a Pulfrich photometer provided Filter S 43 (430 mμ).

Physical and Chemical Data

he results of the serial observations are ected in tables which show physical and chemical data for the accepted thermometric depths (Appendix, Table 1). The given values have been critically examined according to common practice (SVERDRUP *et al.*, 1946, p. 357). Thus observations have been checked by plotting vertical distribution curves and T—S diagrams. The bathythermograms have yielded additional information about the drawing of vertical temperature curves. Values that were obviously wrong were discarded.

All serial data are presented in Table 1, except measurements from the Carribean Sea which are not complete. The cruise in the Carribean Sea may be considered as the necessary trial trip during which the thermometers and reversing bottles were checked.

The tables also contain the bottom depth at the station as recorded by echo-sounding or determined thermometrically in cases where the bottom was closely approached. The time is given as local time (LMT). For the state of the sea the symbols of the Douglas sea scale are used.

0 calm
1 smooth
2 slight
3 moderate
4 rough
5 very rough etc.

The surface observations of temperature and salinity as well as temperatures derived from the bathythermograms are not published separately but only entered in the diagrams showing distribution in the equatorial sections. The wind observations made every hour in connection with the surface observations are later used when the equatorial currents are discussed.

Notes are entered in the tables explaining why values are lacking. It must be observed that all qualities of the water were not always determined. Often samples for Tyndall measurements only were taken.

Results of Dynamic Computations

Values of temperature, salinity, and density at standard depths have been derived from the vertical distribution curves. Corresponding anomalies of dynamic depth, ΔD, have be computed. These data obtained by the care work of G. Koopman are listed in Append Table 2.

References

Anderson, D. H., and R. J. Robinson
1946. Rapid electrometric determination of the alkalinity of sea water. Ind. Eng. Chem., Anal. Ed., v. 18, p. 767.

Buch, K.
1933. Der Borsäuregehalt des Meerwassers und seine Bedeutung bei der Berechnung des Kohlensäuresystem in Meerwasser. Conseil Perm. Internat. p. l'Explor. de la Mer, Rapp. et Proc.-Verb., v. 85, part 3, p. 71.

Buch, K., and Stina Gripenberg
1932. Über den Einfluss des Wasserdruckes auf pH und das Kohlensäuregleichgewicht in grösseren Meerestiefen. Perm. Internat. p. l'Explor. de la Mer, Jour. du Conseil, v. 7, p. 232.

Buch, K., H. W. Harvey, H. Wattenberg and S. Gripenberg
1932. Über das Kohlensäuresystem im Meerwasser. Conseil Perm. Internat. p. l'Explor. de la Mer, Rapp. et Proc.-Verb., v. 79.

Buch, K., and O. Nynäs
1939. Studien über neure pH-Methodik mit besonderer Berücksichtigung des Meerwassers. Acta Acad. Aboensis, Math. et Physica, v. 12, no. 3.

Böhnecke, G.
1927. Die Änderungen des Nullpunktes bei Tiefsee-Umkippthermometern der deutschen Atlantischen Expedition. Veröff. Inst. Meeresk., A, no. 17, p. 6.

Hamaker, H. C.
1941. The oceanographic instruments and the accuracy of the temperature observation. The Snellius Exp., v. 2, part. 1, p. 7.

Kalle, K.
1939. Einige Verbesserungen zur Bestimmung des gelösten Sauerstoffs in Meerwasser. Ann. d. Hydr., v. 67, p. 267.

Knudsen, M.
1923. Some new oceanograpical instruments. Publ. d. Circ., v. 77, p. 10.

Kullenberg, B.
1951. On the shape and the length of the cable dur a deep-sea trawling. Rep. Swedish Deep-Exp., v. 2, no. 1, p. 29.

Pollak, M. J.
1950. Notes on determining the depths of sampling serial oceanographic observations. Sears Fou Jour. Mar. Res., v. 9, p. 17.

Pomeroy, R., and H. D. Kirschman
1945. Ind. Eng. Chem., Anal. Ed., v. 17, p. 715

Schumacher, A.
1933. Neue Hilfstafeln für die Umkippthermome nach Richter und Beiträge zur thermometrisch Tiefenmessung. Ann. d. Hydr., v. 51, p. 273

Svenska Kommunaltekniska Föreningens Handlingar, n
1942.

Theisen, E.
1946. Correction of temperatures and a handy v of making correction charts for reversing therm meters. Rep. Norwegian Fish. Marine Inve v. 8, p. 9.

Theriault, E. J.
1933. Public Health Rep., v. 48, p. 1363.

Thompson, T. G., and R. U. Bonnar
1931. Ind. Eng. Chem. Anal. Ed., v. 3, p. 393.

Thompson, T. G., and T. H. Anderson
1940. The determination of the alkalinity of sea wa Jour. Marine Res. Sears Found., v. 3, p. 224

Wattenberg, H.
1933. Kalziumkarbonat- und Kohlensäuregehalt Meerwassers. Wiss. Ergebn. Deutsch. Atl. E »Meteor» 1925—27, v. 8, p. 122.

Wattenberg, H.
1937. Critical review of the methods used for determ ing nutrient salts and related constituents salt water. Conseil Perm. Int. p. l'Explor. la Mer, Rapp. et Proc.-Verb., v. 103.

Wüst, G.
1932. Die Aufbereitung des Beobachtungsmateri Wiss. Ergebn. Deutsch. Atl. Exp. »Meteor» 19 —27, v. 4., part. 2, p. 6.

APPENDIX

Table 1. PHYSICAL AND CHEMICAL DATA

Table 2. RESULTS OF DYNAMIC COMPUTATIONS

NOTES IN TABLE 1

a) Water bottle not locked.
b) Salinity bottle broken.
c) Thermometer not functioning.
d) Thermometer off scale.
e) Depth uncertain.
f) Value rejected.

Table 1. Physical and Chemical Data.

Depth D meters	Temperature t °C	Salinity S ‰	Density σ_t	Particle content s km^{-1}	Hydrogen ion pH	Alkalinity millival/L	Carbon dioxide CO_2 ml/L	Oxygen O_2 ml/L	Phosphate PO_4–P μg-atoms/L	Silicate SiO_2 μg-atoms/L
Station 43: August 29, 1947; LMT, 1141—1324; 6° 09′ N, 80° 26′ W; depth bottom, 3120 m; wind, SW 2; sea, 1										
2	27.17	33.25	21.38	70	8.11	2.08	0.20	4.85	0.32	
23	26.37	33.26	21.63	80	8.10	2.235	0.17	f)	0.39	
46	21.35	34.41	23.97	66	7.92	2.330	0.43	2.87	1.45	
92	15.39	35.04	25.93	63	7.74	2.385	0.83	1.34	2.00	
183	13.47	34.99	26.31	62	7.66	2.390	1.06	0.67	2.29	
275	12.19	34.89	26.49	56	7.57	2.390	1.34	0.21	2.62	
376	10.34	34.74	26.71	60	7.52	2.390	1.55	0.12	2.84	
477	8.98	34.68	26.89	61	7.45	2.405	1.85	0.12	3.07	
731	6.08	34.61	27.25	88	7.43	2.415	2.06	0.54	3.29	
985	4.85	34.61	27.40	54	7.46	2.430	2.06	1.09	3.10	
1490 e)	3.36	34.63	27.58	51	7.51	2.450	1.64	1.53	3.05	
Station 45: August 30, 1947; LMT, 0955—1105; 5° 13′ N, 81° 45′ W; depth bottom, 3670 m; wind, W 1; sea, 0										
0	26.92	b)		87	8.09	< 2.000			0.32	8.4
22	27.39	32.85	20.99	96	8.07	2.270	0.26	4.81	0.55	10.2
44	17.97	b)		70	7.81	2.305			1.97	10.2
66	15.78	34.93	25.76	118	7.78	2.320		1.35	2.14	10.2
88	15.01	34.95	25.96	79	7.77	2.330	0.49		2.14	12.2
132	13.81	34.97	26.92	56	7.79	2.340	0.71	1.41	2.29	28.2
176	13.42	34.90	26.26	48	7.73	2.345	0.87		2.32	28.2
270	12.27	34.88	26.47	64	7.62	2.340	1.06	0.30	2.75	28.2
364	10.18	34.76	26.73	60	7.57	2.340	1.52	0.13	2.91	32.5
458	d)	34.87		60	7.56	2.365		0.14	3.10	
551	7.25	34.61	27.09	51	7.56	2.365	1.46	0.26	3.29	48.9
739	6.06	34.62	27.26	59	7.57	2.400	1.43	0.60	3.23	57.4
Station 47: September 1, 1947; LMT 1022—1127; 3° 06′ N, 84° 38′ W; depth bottom, 2720 m; wind, S 8; sea, 3										
0	26.10	33.43	21.84	91	8.20	2.235	0.17	4.74	0.45	6.0
23	26.04	33.44	21.87	66	8.28	2.235	0.14	4.78	0.36	
47	16.99	35.00	25.30	63	8.10	2.345	0.28	2.24	1.81	10.2
70	16.03	35.03	25.78	71	8.15	2.360	0.25	1.79	2.03	10.2
93	15.64	35.06	25.89	44	8.15	2.350	0.24	2.08	1.74	10.2
140	14.12	34.98	26.16	33	8.10	2.355	0.29	2.05	1.68	18.2
187	13.89	34.95	26.17	31	7.96	2.380	0.47	0.81	2.36	20.0
280	11.62	34.85	26,57	42	7.90	2.350	0.54	0.24	3.00	21.6
374	9.14	34.75	26.91	30	7.93	2.375	0.53	0.12	3.33	39.4
468	8.04	34.66	27.01	28	7.91	2.385	0.61	0.31	3.36	51.2
562	7.13	34.72	27.19	29	7.88	2.385	0.62	0.36	3,42	58.6
750	6.36	34.60	27.20	27	7.81	2.390	0.75	0.74	3.36	79.6
Station 48: September 2, 1947; LMT, 0945—1210; 1° 45′ N, 86° 14′ W; depth bottom 2770 m; wind, S 8; sea, 3										
0	25.25	34.03	22.55	91	8.27	2.310	0.15	4.81	0.42	
24	25.16	34.03	22.58	92	8.34	2.300	0.11	4.78	0.23	6.0
47	16.13	35.11	25.83	52	8.06	2.355	0,32	2.14	1.71	13.6
71	15.76	35.09	25.90	51	8.05	2.355	0.34	1.95	1.71	13.6
94	15.33	35.06	25.95	40	8.05	2.365	0.35	1.75	2.16	13.6
141	14.45	35.01	26.12	34	8.02	2.355	0.39	1.74	2.07	15.2
189	13.69	34.98	26.26	43	8.08	2.360	0.33	1.53	2.10	20.0
283	11.90	34.90	26.55	30	7.98	2.355	0.44	0.29	2.62	24.0
379	9.40	34.72	26.85	42	7.87	2.375	0.64	0.18	3.04	39.4
475	8.30	34.69	27.00	27	7.91	2.395	0.58	0.22	2.91	39.4
571	7.32	34.64	27.12	30	7.82	2.380	0.74	0.60	3.10	48.4
763	5.85	34.64	27.31	38	7.81	2.370	0.77	0.96	3.16	69.6
985	4.78	34.55	27.36	47	7.60	2.420	1.35	1.42	3.16	79.6

Depth D meters	Temperature t °C	Salinity S ‰	Density σ_t	Particle content s km^{-1}	Hydrogen ion pH	Alkalinity millival/L	Carbon dioxide CO_2 ml/L	Oxygen O_2 ml/L	Phosphate PO_4–P μg-atoms/L	Silicate SiO_2 μg-atoms
1498	3.13	34.62	27.59	40	7.68	2.455	1.06	1.82	3.20	133.4
1971	2.19	34.65	27.69	38	7.74	2.500	0.92	2.29	3.07	158.6
2464	2.05	34.69	27.74	36	7.73	2.515	0.89	2.39	3.07	
2710 a)	2.05									
Station 49: September 3, 1947; LMT, 0915—1011; 0° 33′ N, 87° 50′ W; depth bottom, 2070 m; wind, S 6; sea, 2										
0	24.38	33.86	22.69	87		2.205		4.91	0.06	6.0
18	24.36	33.85	22.69	101		2.135		4.95	0.19	6.0
37 a)	17.48									
55	15.37	b)		50		2.320		1.86	1.84	21.6
73 a)	15.26									
110	14.69	35.05	26.10	29		2.310		2.05	1.94	24.0
147	13.58	34.99	26.28	47		2.310		1.74	2.13	24.0
220	12.55	34.92	26.44	37		2.290		0.71	2.62	21.6
300	10.96	34.83	26.67	40		2.320		0.41	2.75	30.4
380	9.19	34.75	26.90	28		2.350		0.39	2.88	64.0
461	d)	34.68		33		2.345		0.38	3.17	53.0
621	6.93	34.61	27.14	30		2.325		0.58	3.20	58.6
Station 52: September 7, 1947; LMT, 0840—1150; 2° 52′ S, 89° 50′ W; depth bottom, 3230 m; wind, S 8; sea, 2										
0	19.21	34.86	24.88	96	7.91	2.350	0.46	4.74	1.32	13.0
24	18.84	34.87	24.98	101	8.02	2.355	0.35	4.46	1.32	13.6
49	16.97	34.91	25.46	71	7.96	2.350	0.42	3.31	1.55	20.0
73	14.97	35.00	26.00	52	7.94	2.355	0.47	2.43	1.84	21.6
98	14.74	35.08	26.11	38	7.94	2.355	0.47	2.50	1.77	20.0
146	14.20	35.05	26.21	40	7.95	2.355	0.47	2.41	1.74	18.2
196	13.46	34.98	26.31	40	7.80	2.350	0.69	0.91	2.22	21.0
294	11.68	34.89	26.59	51	7.69	2.355	0.95	0.19	2.74	29.8
392	8.77	34.69	26.93	54	7.64	2.365	1.16	0.22	3.10	39.4
490	7.49	34.64	27.09	48	7.65	2.370	1.16	0.52	3.10	48.4
588	6.91	34.61	27.14	44	7.63	2.325	1.16	0.74	3.10	48.4
782	5.47	34.54	27.28		7.59	2.355	1.35	1.18	3.22	66.8
976	4.48	34.57	27.42	35	7.63	2.410	1.26	1.37	3.29	85.2
1465 a)	3.05									
1954	2.34	34.62	27.66	28	7.70	2.455	0.96	2.23	3.12	150.8
2442	1.94	34.67	27.73	55	7.73	2.480	0.87	2.71	2.90	
3126	1.86			47	7.76	2.475		3.13	2.77	158.0
Station 55: September 8, 1947; LMT, 1931—2026; 2° 44′ S, 92° 45′ W; depth bottom, 3660 m; wind, SE 6; sea, 2										
0	19.66	34.84	24.74	103	7.92	2.310	0.44	5.07	1.25	18.2
24	19.31	34.82	24.82	95	7.98	2.320	0.37	4.73	1.26	18.2
49	18.22	35.15	25.36	51	7.80	2.325	0.63	2.03	2.19	18.2
73	14.34	35.08	26.19	61	7.82	2.325	0.66	1.80	2.22	21.6
97	13.74	34.99	26.25	54	7.78	2.325	0.74	1.53	2.29	21.6
147	13.50	34.96	26.27	57	7.78	2.340	0.75	1.68	2.29	24.0
196	13.27	34.94	26.32	73	7.78	2.325	0.73	1.53	2.29	25.2
296	12.08	34.90	26.51	47	7.67	2.320	0.99	0.47	2.77	34.4
395	9.17	34.72	26.89	49	7.67	2.320	1.04	0.28	3.22	46.0
495	7.69	34.63	27.05	44	7.58	2.335	1.34	0.51	3.38	60.6
594	6.75	34.61	27.15	47	7.56	2.340	1.41	0.77	3.36	72.4
793	5.30	34.58	27.33	64	7.69	2.360	1.04	1.41	3.12	79.6
Station 58: September 11, 1947; LMT, 1348—1439; 1° 04′ N, 93° 20′ W; depth bottom, 2800 m; wind, SSW 7; sea										
0	23.00	33.98	23.18	94	7.96	2.160	0.35	4.97	0.55	
25	22.89	33.97	23.21	82	8.01	2.160	0.32	4.93	0.32	6.0
50	15.04	35.01	25.99	59	7.78	2.315	0.71	2.39	1.84	20.0
75	14.89	35.03	26.03	66	7.78	2.330	0.71	2.26	1.87	20.0

Depth D meters	Temperature t °C	Salinity S ‰	Density σ_t	Particle content s km^{-1}	Hydrogen ion pH	Alkalinity millival/L	Carbon dioxide CO_2 ml/L	Oxygen O_2 ml/L	Phosphate PO_4–P μg-atoms/L	Silicate SIO_2 μg-atoms/L
100	14.69	35.03	26.07	56	7.78	2.320	0.71	2.25	1.87	20.0
141	13.77	35.00	26.25	59	7.74	2.325	0.81	1.70	1.94	20.0
181	13.54	34.99	26.29	56	7.72	2.330	0.85	1.61	1.94	24.0
263 a)	12.20									
344	10.45	34.77	26.71	56	7.55	2.330	1.36	0.47	2.61	28.0
440	9.16	34.71	26.88	55	7.50	2.330	1.59	0.37	2.64	41.8
535	7.88	34.65	27.04	52	7.49	2.330	1.66	0.76	2.77	41.8
726	6.47	34.59	27.19	51	7.55	2.365	1.47	1.03	2.96	51.2
tation 59: September 12, 1947; LMT, 0925—1022; 2° 10′ N, 95° 30′ W; depth bottom, 2510 m; wind, SSW 9; sea, 3										
0	25.49	33.72	22.25	79	7.91	2.190	0.38	4.84	0.35	7.6
26	25.46	33.78	22.30	72	7.97	2.205	0.33	4.79	0.29	12.2
52	14.73	34.98	26.04	66	7.73	2.315	0.83	2.49	1.74	24.0
77	14.46	35.04	26.14	69	7.74	2.345	0.83	2.57	1.58	24.0
103	14.22	35.03	26.19	71	7.74	2.315	0.80	2.57	1.84	24.0
152	13.58	34.97	26.26	44	7.74	2.325	0.81	2.55	1.61	24.0
201	13.29	34.98	26.34	48	7.73			2.44	2.00	
300	11.85	34.86	26.53	48	7.60	2.350	1.20	0.83	2.61	30.4
399	9.69	34.73	26.81	43	7.49	2.335	1.63	0.43	3.22	46.0
498	8.03	34.66	27.01	40	7.45	2.310	1.81	0.65	3.33	60.6
597	7.22	34.61	27.10	38	7.45	2.335	1.85	0.72	3.38	64.0
796	5.44	34.58	27.31	57	7.48	2.360	1.76	1.10	3.42	87.2
tation 60: September 13, 1947; LMT, 0908—1009; 3° 18′ N, 97° 44′ W; depth bottom 3320 m; wind, SSW 8; sea, 3										
0	25.91	33.95	22.29	51	7.99	2.300	0.32	4.82	0.19	10.2
23	25.90	33.95	22.29	47	8.01	2.300	0.31	4.82	0.19	10.2
46	25.81	34.00	22.36	39	8.01	2.300	0.31	4.78	0.23	10.2
69	19.34	34.87	24.85	50	7.84	2.375	0.58	3.05	1.35	20.0
92	15.81	34.89	25.73	36	7.72	2.360	0.84	1.89	1.96	16.6
138	13.75	34.94	26.21	27	7.73	2.375	0.85	1.52	2.00	28.0
184	13.00	34.92	26.35	24	7.74	2.375	0.83	1.72	2.26	32.5
275	12.31	34.86	26.44	30	7.71	2.375	0.91	0.94	2.42	32.5
367	11.07	34.78	26.61	26	7.65	2.375	1.08	1.23	2.61	39.4
454	9.33	34.69	26.84	29	7.50	2.365	1.11	0.35	3.04	58.6
542	7.68	34.63	27.05	26	7.51	2.385	1.60	0.47	3.22	64.0
717	6.00	34.57	27.23	27	7.55	2.400	1.52	0.90	3.22	85.8
ation 62: September 14, 1947; LMT, 1103—1153; 4° 33′ N, 100° 07′ W; depth bottom, 3300 m; wind, SSW 8; sea, 2										
0	25.96	33.74	22.12	68	7.91	2.260	0.39	4.72	0.48	10.2
25	25.87	33.74	22.15	65	7.97	2.260	0.34	4.75	0.48	12.2
50	25.51	34.00	22.45	50	7.94	2.310	0.39	4.42	0.74	13.2
75	21.89	34.68	24.03	84	7.83	2.355	0.57	2.85	1.58	21.6
100	13.78	34.83	26.12	44	7.58	2.355	1.22	0.68	2.64	34.4
150	12.38	34.86	26.42	42	7.59	2.360	1.25	0.59	2.48	39.4
200	11.01	34.74	26.60	29	7.59	2.375	1.27	1.38	2.78	39.4
301	10.03	34.71	26.73	42	7.60	2.385	1.27	0.86	2.74	44.2
401	9.08	34.67	26.87	29	7.53	2.385	1.52	0.63	3.00	53.0
501	8.01	34.63	27.01	27	7.44	2.375	1.93	0.83	3.29	63.4
600	6.81	34.56	27.11	28	7.42	2.375	2.04	0.48	3.29	69.6
800	5.47	34.55	27.28	41	7.53	2.400	1.51	0.93	3.22	83.6
ation 63: September 15, 1947; LMT, 1142—1255; 5° 42′ N, 101° 41′ W; depth bottom, 3190 m; wind, S 10; sea, 3										
0	26.43	33.47	21.77	61	8.10	2.235	0.22	4.82	0.35	10.2
25	26.61	33.45	21.70	f)	8.15	2.255	0.20	4.81	0.29	10.2
49	26.33	33.49	21.82	55	8.14	2.255	0.20	4.74	0.39	10.2
74	22.70	34.67	23.79	92	8.06	2.255	0.37	4.27	1.10	12.2
98	16.87	34.70	25.33	57	7.78	2.335	0.69	0.90	2.39	21.6
48	12.51	34.86	26.40	59	7.74	2.355	0.85	0.60	2.78	34.4

Depth D meters	Temperature t °C	Salinity S ‰	Density σ_t	Particle content s km^{-1}	Hydrogen ion pH	Alkalinity millival/L	Carbon dioxide CO_2 ml/L	Oxygen O_2 ml/L	Phosphate PO_4–P μg-atoms/L	Silicat SiO_2 μg-atom
197	11.55	34.79	26.53	36	7.70	2.355	0.94	0.55	2.96	34.4
296	10.29	34.74	26.72	44	7.73	2.365	0.89	0.79	2.84	39.4
396	9.18	34.69	26.87	42	7.68	2.365	1.03	0.76	3.16	48.4
487	8.12	34.64	27.00	40	7.59	2.365	1.32	0.24	3.22	58.6
577	7.11	34.59	27.10	32	7.60	2.365	1.29	0.59	3.33	64.0
759	5.61			59						
Station 65: September 16, 1947; LMT, 1750—2130; 6° 21′ N, 103° 42′ W; depth bottom, 3430 m; wind, S 6; sea.										
0	26.47	33.12	21.49	70	8.02	2.250	0.29	4.81	0.26	
25	26.33	33.10	21.53	60	8.10	2.250	0.23	4.84	0.26	0.4
50	25.23	34.17	22.67	61	8.02	2.320	0.31	4.38	0.65	2.0
75	19.26	34.64	24.70	67	7.82	2.350	0.61	2.15	1.94	11.8
100	14.30	34.80	25.99	48	7.67	2.350	0.96	0.58	2.56	20.4
150	12.21	34.84	26.45	40	7.67	2.355	1.00	0.47	2.56	26.8
200	11.43	34.78	26.54	45	7.64	2.355	1.13	0.73	2.52	31.2
301	10.44	34.76	26.70	45	7.69	2.370	1.00	1.27	2.56	32.0
398	9.55	34.71	26.81	40	7.59	2.360	1.29	0.59	3.20	42.8
495	8.03	34.62	26.99	67	7.53	2.380	1.55	0.08	3.51	61.0
592	6.96	34.59	27.12	45	7.54	2.390	1.52	0.17	3.48	67.8
786	5.57	34.57	27.28	33	7.57	2.400	1.47	0.64	3.38	84.6
983	4.64	34.58	27.41	39	7.62	2.415	1.28	1.00	3.36	101.4
1475	3.10	34.59	27.57	31	7.70	2.445	1.01	1.70	3.26	136.5
1966	2.37	34.63	27.66	59	7.74	2.455	0.83	2.24	3.12	152.8
2458	1.92									
2949	1.71	34.68	27.76	43	7.81	2.475	0.68	3.10	2.84	152.8
3195	1.63	34.68	27.77	54	7.73	2.480	0.79	2.85	2.84	161.2
Station 67: September 18, 1947; LMT, 0655—0755; 7° 38′ N, 106° 17′ W; depth bottom, 3750 m; wind, N 1; sea.										
0	26.80	33.27	21.50	78	8.11	2.235	0.21	4.72	0.29	2.4
24	26.75	33.41	21.62	60	8.11	2.240	0.21	4.70	0.39	2.4
47	25.02	34.12	22.69	60	8.05	2.310	0.29	4.06	0.90	5.0
71	17.02	34.63	25.25	74	7.73	2.345	0.81	0.60	2.39	15.2
94	13.37	34.77	26.16	47	7.65	2.350	1.05	0.24	2.71	17.4
140	11.77	34.78	26.48	52	7.72	2.355	0.91	0.54	2.45	23.0
187	11.05	34.74	26.59	46	7.68	2.365	1.00	0.63	2.96	32.8
280	10.19	34.70	26.70	45	7.67	2.355	1.03	0.70	2.96	35.2
373	9.54	34.68	26.79	46	7.65	2.360	1.11	0.56	3.16	36.8
465	8.43	34.60	26.91	45	7.57	2.360	1.39	0.18	3.33	48.0
558	7.18	34.61	27.11	48	7.54	2.380	1.51	0.09	3.36	
743	5.73	34.50	27.21	64	7.59	2.430	1.36	0.33	3.42	
Station 69: September 19, 1947; LMT, 1015—1125; 8° 22′ N, 108° 00′ W; depth bottom, 3800 m; wind, NW 2; sea										
0	27.23	33.75	21.73	100	8.05	2.275	0.27	4.72	0.10	3.4
25	26.75	33.80	21.92	67	8.13	2.275	0.21	4.62	0.19	1.6
50	26.64	33.81	21.96	100	8.14	2.275	0.20	4.63	0.29	1.2
74	23.43	34.37	23.35	72	8.07	2.335	0.26	3.67	1.00	6.8
99	16.01	34.69	25.53	59	7.74	2.335	0.79	0.42	2.36	18.6
149	12.61	34.82	26.35	60	7.70	2.360	0.92	0.09	2.52	23.8
198	11.57	34.79	26.53	48	7.69	2.360	0.88	0.34	2.81	35.0
297	10.34	34.69	26.67	46	7.69	2.355	0.99	0.50	2.87	39.8
396	9.51	34.67	26.79	44	7.68	2.360	1.02	0.32	2.96	39.8
491	8.41	34.61	26.93	51	7.63	2.360	1.17	0.11	3.12	43.8
583	7.36	34.55	27.03	63	7.62	2.390	1.24	0.08	3.26	64.6
765	5.70	34.55	27.25	54	7.61	2.400	1.29	0.22	3.22	82.4
942	4.81	34.55	27.36	52	7.70	2.445	1.04	0.44	2.78	91.4

Depth D meters	Temperature t °C	Salinity S ‰	Density σ_t	Particle content s km^{-1}	Hydrogen ion pH	Alkalinity millival/L	Carbon dioxide CO_2 ml/L	Oxygen O_2 ml/L	Phosphate PO_4—P μg-atoms/L	Silicate SiO_2 μg-atoms/L
tation 70: September 20, 1947; LMT, 0945—1205; 9° 14′ N, 109° 39′ W; depth bottom, 3690—3860 m; wind, WNW 6; sea, 2										
0	26.93	33.59	21.70	69	8.09	2.290	0.23	4.68	0.19	2.0
15 a)	26.85									
21		33.58	21.72	106	8.09	2.325	0.24	4.66	0.16	1.8
30 a)	26.76									
40		33.70	21.84	60	8.10	2.315	0.23	4.65	0.19	0.8
42 a)	26.75									
57		34.25	22.53	108	8.06	2.365	0.28	4.24	0.48	3.4
60	25.68	34.39	22.53	69	8.09	2.355	0.25	4.24	0.48	3.0
85 a)	17.89									
110	13.12	34.83	26.22	64	7.68	2.380	0.98	0.06	2.56	23.8
160		b)		75	7.67	2.370		0.15	2.56	25.8
177	12.15	34.83	26.45	56	7.68	2.380	0.97	0.18	2.52	29.4
236 a)	11.51									
301 a)	10.68									
345		34.69	26.69	40	7.64	2.380	1.14	0.06	2.87	36.8
375	9.97	34.70	26.73	58	7.66			0.09		
447	8.40	34.65	26.96	45	7.60	2.385	1.28	0.08	3.00	49.0
513		34.61	27.04	49	7.65	2.420	1.20	0.11	3.00	46.6
651	6.33	34.57	27.18	46	7.69	2.445	1.08	0.08	3.04	65.6
905	4.83	34.56	27.37	38	7.61	2.430	1.32	0.66	3.22	83.6
:ation 72: September 21, 1947; LMT, 1500—1603; 10° 35′ N, 112° 05′ W; depth bottom, 3760 m; wind, WNW 6; sea, 2										
0	27.93	33.65	21.43	70	7.94	2.240	0.36	4.63	0.29	2.4
25	27.28	33.68	21.65	69	8.05	2.275	0.26	4.70	0.35	3.4
51	22.71	34.49	23.66	77	7.98	2.330	0.37	3.87	1.00	5.4
76	16.28	34.70	25.46	69	7.75	2.340	0.77	0.46	2.42	17.0
101	13.53	34.81	26.14	56	7.63	2.340	1.07	0.09	2.68	21.2
152	11.80	34.80	26.50	53	7.72	2.355	0.90	0.14	2.48	25.6
200	11.17	34.79	26.60	41	7.72	2.350	0.90	0.26	2.96	32.8
296	10.23	34.73	26.72	45	7.67	2.340	1.02	0.12	2.90	38.8
393	8.77	34.63	26.89	39	7.64	2.340	1.15	0.12	3.06	49.0
489	7.44	34.57	27.03	41	7.64	2.365	1.20	0.09	3.33	60.0
588	6.28	34.55	27.17	43	7.65	2.400	1.19	0.14	3.38	74.6
787	5.06	34.54	27.33	46	7.67	2.415	1.12	0.46	3.33	84.6
986	4.30	34.57	27.44	47	7.73	2.430	0.90	0.80	3.10	96.8
ation 74: September 22, 1947; LMT, 1547—1847; 11° 39′ N, 114° 15′ W; depth bottom, 4150 m; wind, N 5; sea, 1										
0	27.75	34.19	21.88		7.91	2.300	0.39	4.72	0.29	2.4
24	27.33	34.17	22.01		7.97	2.310	0.34	4.63	0.23	2.8
48	22.44	34.55	23.77		8.01	2.355	0.33	5.03	0.42	4.2
72	17.05	34.43	35.09		7.76	2.320	0.75	2.26	1.82	14.4
95	14.49	34.70	25.86		7.58	2.340	1.22	0.09	2.74	23.8
143	12.30	34.82	26.41		7.59	2.340	1.22	0.11	2.61	31.2
192	11.42	34.78	26.55		7.59	2.355	1.26	0.30	2.61	29.4
291	10.29	34.75	26.72		7.59	2.365	1.28	0.15	2.68	36.8
390	9.24	34.68	26.85		7.55	2.355	1.46	0.18	2.87	41.8
487	7.79	34.58	27.00		7.52	2.370	1.60	0.19	3.51	55.8
584	6.77	34.56	27.12		7.53	2.365	1.55	0.18	3.64	62.4
777	5.43	34.57	27.31		7.55	2.405	1.52	0.16	3.74	81.2
969	4.46	34.55	27.40		7.40	2.400	2.12	0.50	3.74	102.8
453	3.06	34.62	27.59		7.57			1.40	3.48	103.6
937	2.20	34.64	27.69		7.67	2.465	1.07	2.10	3.22	103.6
421	1.87	34.66	27.72		7.73			2.50	3.10	112.6
905	1.73	34.67	27.75		7.78	2.475	0.75	2.99	3.00	112.6
390	1.57	34.68	27.76		7.85			3.08	2.90	144.6
874	1.47	34.70	27.79		7.85	2.475	0.55	3.30	2.74	134.8

Depth D meters	Temperature t °C	Salinity S ‰	Density σ_t	Particle content s km^{-1}	Hydrogen ion pH	Alkalinity millival/L	Carbon dioxide CO_2 ml/L	Oxygen O_2 ml/L	Phosphate PO_4—P μg-atoms/L	Silicate SiO_2 μg-atoms
Station 76: September 24, 1947; LMT, 0930—1030; 13° 20′ N, 117° 58′ W; depth bottom, 4290 m; wind, N 8; sea,										
0	27.62	33.84	21.66	60	7.95	2.290	0.36	4.74	0.32	0.8
24	27.62	33.84	21.66	44	8.01	2.340	0.30	4.61	0.29	0.4
49	24.18	34.51	23.24	57	8.01	2.390	0.30	5.02	0.42	0.8
73	20.21	34.42	24.29	54	7.97	2.390	0.40	4.64	0.81	2.4
97	17.44	34.50	25.04	56	7.71	2.380	0.84	1.26	2.42	15.2
146	12.87	34.74	26.24	41	7.61	2.395	1.20	0.06	3.00	31.2
195	11.57	34.74	26.49	35	7.54	2.400	1.44	0.09	2.94	38.8
293	10.28	34.70	26.69	35	7.53	2.425	1.51	0.07	3.36	38.8
392	9.08	34.61	26.81	35	7.53	2.425	1.57	0.09	3.38	47.8
490	7.84	34.56	26.97	39	7.52	2.420	1.60	0.08	3.42	54.6
588	6.69	34.55	27.12	40	7.53	2.435	1.61	0.09	3.51	70.0
784	5.36	34.53	27.28	46	7.52	2.465	1.67	0.11	3.51	90.2
980	4.58	34.55	27.39	33	7.54	2.475	1.59	0.31	3.42	102.8
Station 77: September 25, 1947; LMT, 0950—1047; 14° 13′ N, 120° 25′ W; depth bottom, 4370 m; wind, N 9; sea,										
0	27.89	33.91	21.66	46	7.96	2.355	0.35	4.71	0.23	
25	27.67	33.92	21.72	37	7.99	2.345	0.31	4.69	0.23	2.4
50	26.32	34.26	22.40	45	8.01	2.370	0.32	4.94	0.23	2.4
75	23.24	34.51	23.51	45	8.00	2.385	0.34	5.00	0.35	1.6
100	18.37	34.47	24.80	54	7.80	2.385	0.66	2.61	1.48	9.4
149	13.18	34.72	26.15	34	7.55	2.400	1.40	0.02	2.81	27.8
199	11.60	34.75	26.49	26	7.51	2.405	1.54	0.06	2.81	34.4
298	10.40	34.73	26.69	30	7.55	2.425	1.43	0.03	3.36	37.8
397	9.20	34.64	26.83	22	7.53	2.420	1.51	0.05	3.60	47.8
497	7.77	34.58	27.00	30	7.49	2.425	1.75	0.09	3.67	62.4
592	6.85	34.56	27.11	29	7.50	2.430	1.71	0.09	3.67	73.4
782	5.56	34.56	27.28	26	7.45	2.445	1.94	0.12	3.74	88.4
972	4.60	34.57	27.40	26	7.52	2.480	1.66	0.40	3.42	98.8
Station 78: September 26, 1947; LMT, 1315—1407; 15° 40′ N, 123° 21′ W; depth bottom, 4300 m; wind, N 7; sea,										
0	27.74	33.88	21.66	70	7.95	2.355	0.36	4.74	0.29	0.4
25	27.68	33.89	21.68	47	7.99	2.355	0.31	4.77	0.26	0.4
50	27.86	33.91	21.64	57	8.01	2.370	0.29	4.72	0.23	0.8
75	23.57	34.49	23.40	53	7.99	2.415	0.39	4.92	0.48	1.2
100	18.24	34.45	24.81	48	7.79	2.405	0.67	2.52	1.67	11.8
150	13.07	34.52	26.03	35	7.60	2.405	1.22	0.44	2.68	26.8
199	11.58	34.71	26.45	32	7.51	2.435	1.57	0.09	2.90	32.8
296	10,05	34.67	26.70	42	7.52	2.450	1.59	0.05	3.45	47.8
394	8.57	34.56	26.86	31	7.51			0.09	3.60	54.6
491.	7.45	34.53	27.00	42	7.51	2.455	1.69	0.13	3.60	61.0
594	6.52	34.52	27.13	36	7.48	2.455	1.77	0.13	3.64	82.4
783 a)	5.35									
963	4.42	34.56	27.42	40	7.52	2.500	1.67	0.58	3.51	116.8
Station 79: September 27, 1947; LMT, 1030—1127; 16° 35′ N, 124° 48′ W; depth bottom, 4240 m; wind, NE 6; sea, 1—										
0	26.35	34.28	22.40					4.84		
24	26.28	34.31	22.44					4.82		
48	22.43	34.49	23.73					4.78		
72	19.53	34.41	24.45					4.54		
95	16.18	34.22	25.13					4.32		
143 a)	12.27									
193	10.55	34.45	26.39					1.16		
293	9.72	34.61	26.72					0.06		
394	8.36	34.53	26.87					0.19		
495	7.25	34.51	27.01					0.14		
588	6.40	34.53	27.15					0.15		
775	5.31	34.47	27.25					0.18		
962	4.38	34.54	27.42					0.48		

Depth D meters	Temperature t °C	Salinity S ‰	Density σ_t	Particle content s km^{-1}	Hydrogen ion pH	Alkalinity millival/L	Carbon dioxide CO_2 ml/L	Oxygen O_2 ml/L	Phosphate PO_4—P μg-atoms L	Silicate SiO_2 μg-atoms L
tation 80: September 28, 1947; LMT, 0919—1303; 17° 46′ N, 126° 51′ W; depth bottom, 4620 m; wind, NE 9; sea, 3										
0	25.63	34.54	22.82	43	8.06	2.400	0.28	4.91	0.32	0.8
24	25.50	34.56	22.87	41	8.07	2.425	0.28	4.86	0.26	
47	23.48	34.61	23.52	37	8.10	2.445	0.26	5.22	0.29	0.8
71	20.30	34.55	24.35	36	8.13	2.420	0.25	5.43	0.35	0.8
95 a)	19.08									
142	14.97	34.22	25.39	33	8.09	2.445	0.31	4.67	0.84	7.6
190	11.66	34.29	26.12	27	7.80	2.435	0.76	1.76	2.45	24.8
287	9.94	34.63	26.70	23	7.64	2.440	1.11	0.38	3.00	37.8
379	8.74	34.50	26.78	31	7.62	2.450	1.28	0.19	3.06	52.4
474	7.76	34.46	26.90	25	7.62	2.455	1.29	0.21	3.16	57.8
573	6.68	34.46	27.06	23	7.63	2.485	1.28	0.22	3.45	71.2
771	5.41	f)		23	7.63	2.495		0.24	3.45	85.8
970	4.44	34.52	27.38	31	7.63	2.520	1.29	0.50	3.45	108.4
1445	3.10	34.55	27.53	30	7.66			1.21	3.26	103.6
2397	1.82	34.63	27.71	24	7.92	2.545	0.56	2.53	3.00	150.0
2874	1.64	34.65	27.74	20	8.01		0.40	2.85	2.94	164.0
3350	1.52	34.64	27.74	39	8.05	> 2.55		3.10	2.81	165.6
3826	1.50	34.67	27.76	22	7.96	> 2.55	0.40	3.29	2.81	165.6
4207	1.43									
4398	1.49	34.68	27.78	16	7.97	> 2.55	0.38	3.44	2.56	162.8
:ation 81: September 29, 1947; LMT, 1037—1144; 15° 34′ N, 127° 11′ W; depth bottom, 4820 m; wind, NE 5; sea 2										
0	27.34	34.15	21.94					4.74		
25	26.90	34.22	22.19					4.80		
50	23.13	34.42	23.47					5.27		
75	20.50	34.54	24.30					5.41		
100	18.77	34.45	24.67					4.14		
149	13.20	34.21	25.76					1.95		
199	11.94	34.66	26.35					0.10		
300	10.10	34.63	26.67					0.07		
401	8.83	34.55	26.80					0.05		
502	7.62	34.54	27.00					0.07		
598	6.53	34.49	27.11					0.09		
789	5.22	34.49	27.28					0.32		
981	4.33	34.51	27.39					0.58		
ation 82: September 30, 1947; LMT, 0915—1040; 13° 19′ N, 127° 25′ W; depth bottom, 4730 m; wind, NE 2; sea, 1										
0	27.32	33.89	21.80	49	7.90			4.77	0.32	
24	27.19	33.87	21.84	49	7.92			4.79	0.29	
48	22.87	34.41	23.54	50	7.93			4.90	0.39	
72	19.15	34.54	24.65	50	7.76			2.65	1.64	5.0
96	14.94	34.75	25.80	46	7.52			0.23	2.65	18.6
144	12.56	34.90	26.42	45	7.50			0.07	2.74	25.8
194	11.78	34.81	26.50	28	7.51			0.22	2.71	25.8
295	10.80	34.76	26.64	25	7.49			0.18	3.29	35.0
395	9.79	34.72	26.78	23	7.44			0.11	3.32	44.8
495	8.74	34.65	26.90	24	7.43			0.12	3.52	49.0
592	7.54	34.58	27.03	29	7.36			0.15	3.64	61.0
785	5.86	34.55	27.23	29	7.44			0.20	3.57	82.4
978	4.74	34.56	27.38	32	7.38			0.46	3.57	108.4
ation 84: September 30, 1947; LMT, 2133—2247; 12° 32′ N, 127° 31′ W; depth bottom, 4730 m; wind, NNE 3; sea, 1										
0	27.59	34.07	21.85	50				4.76		
25	27.16	34.09	22.00	53				4.73		
50	21.73	34.51	23.94	56				4.72		
74	16.50	34.61	25.35	46				1.20		
99	13.72	34.81	26.11	47				0.08		

Depth D meters	Temperature t °C	Salinity S ‰	Density σ_t	Particle content s km^{-1}	Hydrogen ion pH	Alkalinity millival/L	Carbon dioxide CO_2 ml/L	Oxygen O_2 ml/L	Phosphate PO_4—P μg-atoms/L	Silicate SiO_2 μg-atoms
148	12.23	34.85	26.45	38				0.16		
198	11.50	34.79	26.54	31				0.19		
298	10,61	34.77	26.69	28				0.15		
398	9.67	34.69	26.79	28				0.10		
498	8.59	34.66	26.93	25				0.13		
592	7.50	34.60	27.05	35				0.13		
780	5.82	34.54	27.24	27				0.19		
968	4.80	34.57	27.38	26				0.35		
Station 85: October 1, 1947; LMT, 1103—1158; 11° 30′ N, 127° 37′ W; depth bottom, 4890 m; wind, WNW 7; sea,										
0	27.97	33.81	21.53	41	8.01			4.71	0.32	
25	27.13	33.90	21.88	96	8.12			4.69	0.29	
50	19.20	34.41	24.54	64	8.07			3.79	0.96	4.2
74	14.60	34.73	25.87	51	7.69			0.16	2.90	22.0
99	13.03	34.81	26.25	39	7.70			0.21	2.71	24.8
148	12.02	34.79	26.45	32	7.66			0.22	2.74	26.8
198	11.47	34.79	26.55	33	7.66			0.22	2.71	31.2
299	10.47	34.74	26.69	25	7.63			0.16	3.16	36.8
400	9.36	34.64	26.80	21	7.58			0.08	3.36	48.0
500	8.12	34.62	26.98	23	7.60			0.19	3.54	54.6
596	7.23	34.57	27.07	20	7.61			0.22	3.45	66.4
787	5.64	34.55	27.25	20	7.62			0.28	3.45	85.8
978	4.70	34.57	27.39	23	7.67			0.40	3.36	98.0
Station 86: October 2, 1947; LMT, 1200—1259; 9° 50′ N, 128° 13′ W; depth bottom, 4610 m; wind, SW 7; sea, 2										
0	27.50	33.12	21.16	67	8.07			4.69	0.29	
24	25.59	33.68	22.18	93	8.08			4.86	0.42	0.8
48	19.28	34.43	24.54	60	8.01			3.89	1.06	5.0
72	14.13	34.79	26.01	61	7.68			0.19	3.00	24.8
97	12.69	34.77	26.29	31	7.64			0.15	3.00	26.8
145	11.62	34.81	26.53	29	7.65			0.27	2.90	28.4
194	11.03	34.77	26.61	37	7.65			0.28	2.87	29.4
291	10.08	34.70	26.72	26	7.62			0.18	2.94	36.8
389	9.12	34.66	26.85	27	7.62			0.15	3.42	45.6
486	8.10 d)	34.58	26.95	27	7.57			0.14	3.67	59.0
583	7.13	34.56	27.08	26	7.62			0.19	3.57	66.8
778	5.66	34.52	27.24	27	7.59			0.47	3.70	81.2
973	4.88	34.52	27.33	29	7.65			0.88	3.36	93.4
Station 87: October 3, 1947; LMT, 1055—1505; 8° 25′ N, 128° 48′ W; depth bottom, 4720 m; wind, SW 5; sea, 1—										
0	27.29	33.96	21.87	75	8.06			4.69	0.32	
25	27.29	33.97	21.88	52	8.06			4.72	0.32	0.8
50	27.33	34.28	22.09	67	8.08			4.65	0.35	0.8
75	23.85	34.61	23.41	61	8.01			4.44	0.65	3.4
100	15.98	34.45	25.34	46	7.92			3.21	1.42	9.4
144	12.30	34.67	26.29	42	7.67			0.67	2.61	26.8
240	10.65	34.74	26.66	40	7.70			0.77	2.64	31.2
335	9.85	34.71	26.76	32	7.67			0.55	2.81	35.0
431	9.08	34.68	26.88	30	7.54			0.22	3.10	39.8
622	7.14	34.60	27.10	39	7.59			0.21	3.70	65.6
813	5.72	34.56	27.26	36	7.60			0.51	3.48	81.2
1619	3.49	34.64	27.57	25	7.50			1.80	3.42	142.8
2116	2.10	34.63	27.69	29	7.53			2.29	3.16	156.2
2613	1.85	34.66	27.73	39	7.58			2.62	2.96	168.8
3110	c)	34.66		35	7.60			2.99	2.94	162.8
3606	1.48	34.70	27.78	42	7.65			3.38	2.74	155.0
4203	1.43	34.72	27.81	57	7.66			3.77	2.68	148.6
4600	1.41	34.72	27.81	43	7.75			3.67	2.56	148.6

Depth D meters	Temperature t °C	Salinity S ‰	Density σ_t	Particle content s km^{-1}	Hydrogen ion pH	Alkalinity millival/L	Carbon dioxide CO_2 ml/L	Oxygen O_2 ml/L	Phosphate PO_4—P μg-atoms/L	Silicate SiO_2 μg-atoms/L
Station 88: October 4, 1947; LMT, 1046—1149; 6° 44′ N, 129° 28′ W; depth bottom, 4350 m; wind, SSW 6; sea, 2										
0	27.47	34.65	22.33	71	7.97			4.61	0.32	1.8
25	27.71	34.64	22.25	78	8.07			4.43	0.39	0.8
50	26.80	34.77	22.63	56	8.00			4.48	0.48	0.8
75	24.40	34.80	23.39	79	7.98			4.45	0.90	5.0
100	23.05	34.95	23.91	59	8.00			4.47	1.03	5.0
150	19.57	34.83	24.76	45	7.92			3.14	1.51	10.2
200 a)	11.88									
301	10.12	34.75	26.75	33	7.69			1.13	2.45	31.2
401	9.33	34.70	26.84	34	7.65			1.07	2.61	36.8
502 a)	8.49									
598	6.88	34.60	27.14	64	7.62			0.35	2.94	54.6
789	5.67	34.58	27.28	47	7.60			0.69	2.94	71.2
977	4.80	34.55	27.36	47	7.67			1.07	2.84	83.6
Station 89: October 5, 1947; LMT, 1052—1154; 4° 49′ N, 130° 52′ W; wind, S 6; sea, 3										
0	24.66	34.63	23.19	70	7.87			5.01	0.61	1.8
25	24.47	34.64	23.26	74	7.91			4.95	0.65	1.8
50	24.57	34.66	23.23	61	7.87			4.96	0.71	1.8
74	23.83	34.75	23.52	69	7.90			4.83	0.81	1.8
99	23.52	34.80	23.65	78	7.92			4.66	0.84	1.8
148	22.50	34.87	24.00	43	7.89			4.51	1.03	3.4
198	20.12	34.86	24,64	45	7.72			3.64	1.39	8.4
297	10.17	34.66	26.67	29	7.66			2.26	2.16	26.8
397	9.62	34.70	26.80	29	7.61			1.69	2.29	30.4
496	8.90	34.66	26.89	30	7.52			0.98	2.64	34.4
592	7.97 d)	34.61	26.99	22	7.52			0.44	2.90	44.8
783	5.93	34.58	27.21	20	7.44			0.66	3.26	66.4
974	4.77	34.56	27.38	34	7.52			1.03	3.16	81.2
Station 90: October 6, 1947; LMT, 0918—1023; 3° 05′ N, 133° 06′ W; depth bottom, 4320 m; wind, E 5; sea, 2										
0	24.50	34.69	23.28	69	7.99			4.82	0.74	2.4
24	24.45	34.65	23.26	79	8.03			4.91	0.71	2.4
47	23.88	34.72	23.49	59	7.96			4.77	0.81	3.4
71	22.66	34.72	23.84	70	7.93			4.48	1.03	8.0
95 a)	22.45									
142	16.83	34.91	25.50	46	7.79			2.18	1.96	14.4
190	13.40	34.95	26.30	34	7.72			1.53	2.32	10.2
284	12.17	b)		38	7.63			0.78	2.48	24.8
379	10.85	34.78	26.65	38	7.62			1.00	2.48	32.0
474	9.48	34.69	26.82	41	7.54			0.63	2.84	35.0
560	8.00	34.62	27.00	30	7.55			0.47	3.12	44.8
733	6.03	34.56	27.22	27	7.59			1.38	3.12	57.8
905	4.88	34.56	27.36	31	7.64			1.93	3.04	74.6
Station 91: October 7, 1947; LMT, 0601—0715; 1° 49′ N, 134° 45′ W; depth bottom, 4590 m; wind, ESE 7; sea, 2										
0	24.38	34.72	23.34	162				4.90		
25 a)	24.18									
50	23.48	34.76	23.63	67				4.69		
74	21.50	34.94	24.33	75				4.22		
99	19.83	34.90	24.75	78				3.29		
148	13.60	34.90	26.21	47				1.77		
194	12.84	34.91	26.37	21				1.55		
285	11.81	34.85	26.54	40				1.07		
376	10.04	34.85	26.67	41				0.68		
467	9.30	34.76	26.90	31				0.62		
556	7.59	34.60	27.04	34				0.91		
735	6.15	34.52	27.18	37				1.79		
913	5.14	34.53	27.31	33				1.92		

Depth D meters	Temperature t °C	Salinity S ‰	Density σ_t	Particle content s km^{-1}	Hydrogen ion pH	Alkalinity millival/L	Carbon dioxide CO_2 ml/L	Oxygen O_2 ml/L	Phosphate PO_4—P μg-atoms/L	Silicate SiO_2 μg-atoms
Station 93: October 8, 1947; LMT, 0350—0754; 0° 06′ S, 135° 58′ W; depth bottom, 4440 m; wind, E 6; sea, 3										
0	22.75	35.20	24.18	92	8.10			4.38	0.93	2.4
22	22.73	35.24	24.21	78	8.00			4.19	0.96	2.4
43	22.68	35.23	24.22	70	8.00			4.17	1.00	2.4
64	22.25	35.24	24.35	45	8.00			3.91	1.06	2.4
85	21.06	35.24	24.68	49	8.01			3.53	1.13	4.2
128	15.09	35.10	26.05	41	7.98			3.02	1.32	9.8
166	13.30	35.01	26.36	67	7.92			3.02	1.67	13.6
242	11.97	b)		55	7.84			1.84	1.90	20.4
317	10.53	34.78	26.70	33	7.71			0.81	2.56	28.4
393	8.80	34.68	26.92	35	7.67			1.23	2.52	30.4
485	7.72	34.65	27.06	33	7.66			0.07	2.94	36.8
668	6.42	34.58	27.19	27	7.66			1.45	2.94	50.0
851	5.34	34.55	27.29	30	7.69			1.76	3.00	66.8
1486	3.15	34.60	27.56	22	7.57			2.20	3.04	119.6
1966	2.27	34.66	27.69	24	7.62			2.43	3.04	152.8
2447	1.89	34.66	27.72	21	7.66			2.86	2.84	112.6
2928	1.73	34.68	27.76	26	7.65			3.09	2.78	112.6
3408	1.51	34.68	27.77	46	7.69			3.45	2.74	112.6
3889	1.38	34.70	27.79	33	7.71			3.75	2.56	112.6
4177	1.41	34.70	27.79	24	f)			f)	2.56	112.6
4311		34.70		22	7.72			3.75		
Station 94: October 9, 1947; LMT, 1010—1132; 3° 00′ S, 136° 26′ W; depth bottom, 4460 m; wind, SSE 4; sea, 2										
0	24.53	35.33	23.75	71	7.98			4.82		
24	24.33	35.33	23.81	78	7.99			4.81		
48	24.28	35.31	23.82	61	8.00			4.79		
72	24.22	35.35	23.86	60	7.99			4.68		
97	20.31	35.49	25.07	75	7.94			3.35		
145	13.28	34.96	26.32	52	7.77			1.44		
194	12.82	34.94	26.41	53	7.72			1.13		
291	11.86	b)		38	7.64			0.58		
388	10.11	b)		38	7.53			0.14		
485	8.12	34.67	27.01	38	7.53			0.65		
581	6.90	34.62	27.15	56	7.60			1.26		
773	5.39	34.56	27.30	90	7.63			1.91		
965	4.58	b)		40	7.64			1.95		
Station 102: November 5, 1947; LMT, 2023—2127; 13° 25′ S, 149° 30′ W; depth bottom, 4630 m; wind, ENE 6; sea, 2										
1	27.74	36.22	23.42		8.05			4.70		
23	27.72	36.18	23.39		8.07			4.68		
47	27.51	36.38	23.62		8.06			4.70		
70	27.35	36.34	23.64		8.06			4.69		
94	27.42	36.34	23.61		8.06			4.68		
141	24.68	36.29	24.44		8.05			4.21		
191	23.78	36.41	24.79		8.05			4.09		
290	16.82	35.30	25.80		8.01			3.93		
389	10.62	34.63	26.58		7.85			2.60		
489	7.94	34.51	26.91		7.79			2.60		
585	6.32	34.50	27.14		7.76			3.05		
776	5.18	34.50	27.28		7.77			3.10		
967	4.36	34.50	27.37		7.71			3.13		
1950 e)		34.61								
2925 e)		34.63								
3900 e)		34.72								

Depth D meters	Temperature t °C	Salinity S ‰	Density σ_t	Particle content s km^{-1}	Hydrogen ion pH	Alkalinity millival/L	Carbon dioxide CO_2 ml/L	Oxygen O_2 ml/L	Phosphate PO_4—P μg-atoms/L	Silicate SiO_2 μg-atoms/L
Station 105: November 10, 1947; LMT, 1704—1812; 7° 38′ S, 152° 53′ W; depth bottom, 4990 m; wind, ENE 10; sea, 3										
1	27.35	35.67	23.13	41	8.01	2.370	0.30	4.79	0.61	4.2
24	27.29	35.62	23.12	71	8.06	2.340	0.26	4.75	0.61	6.0
47	27.27	35.62	23.13	41	8.06	2.370	0.27	4.76	0.61	6.8
71	27.28	35.64	23.13	43	8.07	2.355	0.25	5.06	0.68	6.8
94	27.27	35.74	23.21	31	8.07	2.355	0.25	4.59	0.71	6.8
141	26.46	36.30	23.88	79	8.10	2.400	0.23	4.14	0.58	6.8
188	22.30	36.11	24.99	29	8.04	2.395	0.30	3.83	0.68	6.8
283	12.64	34.91	26.35	47	7.80	2.320	0.70	2.02	2.16	17.8
377	9.28	34.83	26.97	20	7.80	2.320	0.74	2.17	2.42	28.4
471	8.88	34.73	26.95	27	7.80	2.320	0.74	2.27	2.56	32.8
565	7.08	34.58	27.10	21	7.77	2.320	0.82	2.65	2.87	43.8
754	5.60	34.56	27.27	22	7.75	2.335	0.86	2.40	2.81	60.0
942 a)	4.51									
1431	2.90									
1945 a)	2.23									
2431	1.89	34.63	27.70	29	7.69	2.450	0.95	3.01	2.68	148.6
2917	1.70	34.64	27.73	19	7.70	2.445	0.81	3.47	2.64	145.8
3403	1.49									
3890	1.41	34.89	27.95	19	7.82	2.385	0.57	3.31	2.06	71.2
4376	1.33									
4862	1.30	34.92	27.98		7.78	2.385	0.55	3.63	2.22	71.2
Station 108: November 13, 1947; LMT, 0950—1048; 2° 01′ S, 152° 16′ W; depth bottom, 4750 m; wind, E 6; sea, 2										
1	25.52	35.24	23.39	44	7.96	2.375	0.35	4.73	0.68	5.0
23	25.58	35.24	23.37	67	7.99	2.395	0.34	4.68	0.68	5.0
47	25.33	35.23	23.44	45	7.99	2.390	0.34	4.72	0.84	5.0
70	25.25	35.22	23.45	51	7.98	2.390	0.35	4.66	0.81	5.0
93	25.12	35.20	23.48	44	7.98	2.390	0.35	4.62	0.81	5.0
140	24.36	35.56	23.98	39	7.99	2.420	0.35	4.07	0.90	6.0
188	14.88	35.16	26.14	48	7.68	2.410	0.95	2.40		
285	11.50	34.84	26.58	50	7.62	2.395	1.17	1.59	2.19	28.4
381	10.54	34.80	26.70	22	7.66	2.375	1.09	2.09	2.42	28.4
478	8.62	34.67	26.94	26	7.63	2.385	1.23	1.95		
577	7.06	34.58	27.10	48	7.57	2.385	1.40	1.78	2.87	47.6
759	5.88	34.57	27.25	28	7.59	2.395	1.34	2.15	2.90	64.2
946 a)	4.53									
Station 111: November 15, 1947; LMT, 0116—0344; 0° 02′ N, 153° 07′ W; depth bottom, 2490 m; wind, E 11; sea, 4										
0	25.19	35.11	23.39	54	7.91	2.325	0.41	4.74	0.58	6.0
25	25.25	35.12	23.37	57	7.97	2.335	0.35	4.71	0.61	6.0
49	25.25	35.21	23.45	45	7.97	2.335	0.35	4.73	0.77	6.8
74	24.95	35.25	23.57	51	7.96	2.325	0.35	4.53	0.77	6.8
98	23.84	35.25	23.91	44	7.96	2.325	0.35	4.02	0.87	8.4
147	18,68	35.29	25.34	25	7.94	2.335	0.42	3.20	1.13	11.8
197	13.99	35.00	26.21	31	7.89	2.335	0.53	3.22	1.51	18.6
295	11.48	34.85	26.58	47	7.77	2.335	0.78	1.99	1.96	28.4
394	10.15	34.75	26.74	24	7.68	2.310	0.99	1.51	2.39	34.4
492	8.15	34.62	26.97	24	7.60			1.04	2.84	46.6
590	7.00	34.61	27.13	21	7.63	2.325	0.60	1.30	2.96	55.2
787	5.57	34.55	27.26	28	7.62	2.350	1.25	1.89	3.33	75.6
984	c)	34.56		27		2.380		1.96	3.36	97.0
1431	3.29	34.65	27.59	10	7.62	2.395	1.23	2.10	3.48	130.6
1918	2.34	34.68	27.71	19	7.68	2.440	1.02	2.43	3.22	155.0
2385	1.87	34.68	27.75	13	7.68	2.445	1.00	2.87	3.20	

Depth D meters	Temperature t °C	Salinity S ‰	Density σ_t	Particle content s km^{-1}	Hydrogen ion pH	Alkalinity millival/L	Carbon dioxide CO_2 ml/L	Oxygen O_2 ml/L	Phosphate PO_4—P μg-atoms/L	Silicate SiO_2 μg-atoms
Station 113: November 16, 1947; LMT, 2133—2229; 2° 06′ N, 149° 49′ W; depth bottom, 4540 m; wind, E 8; sea										
0	24.74	35.16	23.57	84	7.81	2.340	0.56	4.72	0.84	6.0
25	24.88	35.16	23.53	52	7.91	2.340	0.41	4.72	0.84	6.0
50	24.69	35.16	23.58	49	7.91	2.340	0.41	4.69	0.84	6.8
74	24.63	35.15	23.59	69	7.91	2.340	0.41	4.58	0.81	8.0
99	24.57	35.14	23.60	53	7.90	2.340	0.42	4.59	0.77	6.8
148 a)	24.11									
196	12.09	34.76	26.40	53	7.71	2.320	0.90	2.13	2.10	28.4
291	11.18	34.83	26.63	25	7.64	2.335	1.09	1.21	2.32	29.4
387	10.04	34.75	26.76	26	7.62	2.335	1.18	1.53	2.39	34.4
482	8.91	34.69	26.91	27	7.60	2.335	1.21	1.57	2.71	39.8
572	7.22	34.62	27.10	29	7.51	2.340	1.49	0.65	3.16	59.0
753	5.71	34.55	27.25	94	7.54			1.57	3.04	69.0
933	4.74	34.56	27.38	26	7.56	2.375	1.42	1.87	2.96	84.6
Station 115: November 17, 1947; LMT, 2143—2220; 4° 04′ N, 149° 42′ W; wind, ESE 5; sea, 2										
0	26.70	34.97	22.81	54	7.86	2.310	0.52	4.71	0.39	4.2
25	26.58	34.96	22.84	57	7.90	2.310	0.41	4.68	0.48	6.8
50	25.35	35.00	23.26	46	7.89	2.340	0.43	4.61	0.74	4.2
75	24.96	35.15	23.49	57	7.88	2.320	0.45	4.75	0.74	6.0
100	24.71	35.14	23.56	47		2.320		4.97	0.77	6.8
150	24.06	35.07	23.69	34	7.81	2.320	0.55	4.73	0.87	6.8
200	13.47	34.67	26.06	28	7.64	2.320	1.04	1.93	2.06	23.8
301	10.06	34.74	26.76	41	7.59	2.335	1.28	2.29	2.13	29.4
403	9.24	34.71	26.87	26	7.57	2.335	1.36	1.78	2.48	35.8
505	8.33	34.66	26.96	22	7.53	2.335	1.49	1.61	2.68	37.8
Station 116: November 18, 1947; LMT, 5° 47′ N, 149° 42′ W; wind, SSE 11; sea, 4										
0	27.49	34.92	22.52	64	7.99	2.295	0.30	4.68	0.45	4.2
25	27.30	34.92	22.58	53	8.02			4.68		
50	27.26	34.96	22.62	57	8.07	2.320	0.25	4.67	0.45	4.2
75	27.29	34.93	22.59	90	8.08	2.325	0.24	4.61	0.45	4.2
100	27.13	34.95	22.67	44	8.09	2.320	0.24	4.67	0.48	4.2
150	22.53	34.89	24.01	26	8.04	2.320	0.29	3.69	0.96	7.6
199	12.11	34.68	26.34	79	7.83	2.320	0.64	1.18	2.68	26.8
298	9.55	34.67	26.78	26	7.71	2.325	0.93	1.16	2.58	34.4
397	8.81	34.67	26.91	20	7.66	2.325	1.09	1.20	2.58	37.8
496	8.11	34.64	27.00	23	7.58	2.335	1.32	0.60	3.12	44.8
586	7.06	34.60	27.11	28	7.62	2.365	1.22	0.57	3.29	54.6
766	5.56	34.55	27.26	41	7.64	2.380	1.20	1.41	3.20	63.4
946	4.70	34.57	27.39	22	7.61	2.390	1.27	1.15	3.38	82.4
Station 119: November 21, 1947; LMT, 2223—2330; 8° 43′ N, 148° 36′ W; depth bottom, 5220 m; wind, SE 2; sea,										
0	27.46	33.61	21.55	81	8.00	2.11	0.28	4.69	0.26	4.2
25	27.61	33.85	21.68	63	8.01	2.13	0.28	4.68	0.29	3.8
50	24.69	34.52	23.09	64	8.05	2.255	0.27	4.67	0.39	3.4
75	18.54	34.72	24.94	60	7.97	2.295	0.40	4.06	0.65	12.2
101	14.31	34.60	25.83	42	7.79	2.295	0.69	2.21	1.67	21.2
151	11.27	34.66	26.48	35	7.63	2.300	1.10	0.79	2.52	32.0
199	10.33	34.72	26.69	59	7.61	2.310	1.20	0.74	2.56	36.8
296	9.32	34.67	26.81	45	7.61	2.320	1.23	0.73	2.52	38.8
393	8.63	34.68	26.94	25	7.61	2.310	1.22	0.95	2.81	41.8
490	7.99	34.60	26.98	23	7.60	2.320	1.24	0.97	2.84	46.6
580	7.24	34.59	27.08	26	7.60	2.325	1.25	0.88	3.06	57.8
759	5.63	34.57	27.28	39	7.55	2.340	1.48	0.89	3.22	79.0
938	4.77	34.57	27.39	25	7.55	2.395	1.51	1.04	3.12	98.0

Depth *D* meters	Temperature *t* °C	Salinity *S* ‰	Density σ_t	Particle content *s* km^{-1}	Hydrogen ion pH	Alkalinity millival/L	Carbon dioxide CO_2 ml/L	Oxygen O_2 ml/L	Phosphate PO_4—P μg-atoms/L	Silicate SiO_2 μg-atoms/L
Station 121: November 23, 1947; LMT, 0848—0942; 11° 25′ N, 149° 33′ W; wind, E 9; sea, 3										
0	26.49	33.95	22.11	54	8.06	2.245	0.26	4.77	0.35	5.0
25	26.53	34.07	22.19	64	8.10	2.255	0.23	4.77	0.35	5.0
50	26.45	34.02	22.18	38	8.11	2.255	0.22	4.80	0.35	5.0
75	22.20	34.90	24.10	52	8.11	2.325	0.24	5.23	0.32	6.0
100	19.59	34.90	24.81	60	8.07	2.325	0.29	4.94	0.39	6.8
149	12.93	34.45	25.99	21	7.78	2.305	0.75	1.64	1.94	30.4
199	11.00	34.52	26.42	38	7.64	2.310	1.10	0.65	2.62	39.8
299	9.51	34.63	26.77	28	7.65	2.325	1.09	0.45	2.56	49.0
398	8.43	34.62	26.93	27	7.63	2.325	1.15	0.51	2.90	
498	7.41	34.55	27.02	21	7.59	2.335	1.32	0.55	2.90	
587 a)	6.48									
761	5.22	34.57	27.33	95	7.55	2.375	1.48	0.33	3.33	92.4
937	4.43	34.56	27.41	21	7.55	2.390	1.51	0.70	3.33	102.8
Station 122: November 24, 1947; LMT, 1248—1412; 13° 24′ N, 151° 12′ W; depth bottom, 5520 m; wind, NE 9; sea, 3										
0	26.54	33.88	22.04	61	8.08			4.73	0.35	7.2
23	26.50	33.89	22.06	43	8.10	2.19	0.22	4.79	0.39	
46	26.48	33.90	22.08	46	8.08	2.17	0.23	4.77	0.32	7.2
70	21.48	34.90	24.31	86	8.06	2.310	0.29	5.03	0.39	8.4
93	17.91	34.67	25.06	52	7.97			3.60	1.03	11.8
139	11.61	34.32	26.15	28	7.76	2.270	0.79	2.23	2.04	30.4
188	10.51	34.43	26.44	27	7.68	2.270	0.99	1.32	2.58	39.8
287	9.04	34.53	26.76	41	7.61	2.305	1.20	0.41	2.87	47.8
386	7.83	34.50	26.93	22	7.59	2.310	1.32	0.38	3.12	66.4
485	6.93	34.48	27.04	25	7.57	2.320	1.40	0.51	3.16	67.8
573	6.10	34.48	27.16	29	7.58	2.325	1.38	0.56	3.26	74.6
748	4.97	34.53	27.33	71	7.60	2.370	1.33	0.91	3.42	93.4
923 a)	4.31									
Station 123: November 25, 1947; LMT, 1315—1800; 15° 14′ N, 152° 49′ W; depth bottom, 5750 m; wind, E 8; sea, 4										
0	25.92	33.96	22.29	47	7.99			4.86	0.35	14.4
25	25.90	34.02	22.35	49	8.07			4.86	0.39	14.4
50	25.94	34.58	22.70	86	8.06			4.85	0.35	14.4
75	23.55	34.75	23.60	40	8.03			5.27	0,29	14.4
100	20.84	34.76	24.37	50	8.03			4.69	0.61	13.6
149	16.72	34.59	25.29	41	7.93			3.25	1.16	17.0
196	12.20	34.35	26.06	36	7.70			1.83	2.22	34.4
289	9.75	34.52	26.64	27	7.68			0.41	2.94	47.8
382	8.42	34.53	26.87	29	7.53			0.32	3.06	47.8
475	7.41	34.51	26.96	33	7.52			0.38	3.48	73.4
570	6.36	34.51	27.14	21	7.50			0.44	3.36	81.2
760	5.05	34.50	27.29	26	7.51			0.68	3.38	98.0
950	4.36	34.57	27.43	45	7.52			0.91	3.51	114.0
1436	2.88	34.59	27.59	24	7.53			1.60	3.33	145.8
1920	2.11	34.64	27.70	30	7.71			2.21	3.06	159.8
2404		b)		26	7.72					
2888	1.62	34.66	27.75	21	7.72			2.92	3.00	165.6
3372		34.68		20	7.77					
3856	1.42									
4308		34.70		21	7.78			3.90	2.71	167.4
4824 a)	1.37									
5550 a)	1.44									
Station 126: December 17, 1947; LMT, 0918—1045; 14° 39′ N, 164° 50′ W; depth bottom, 5480 5530 m; wind, NNE 10; sea, 4										
0	26,13	34.50	22.64	38		2.270		4.93	0.35	3.4
22	26.14			32						
45	26.13	34.54	22.67	57		2.295		4.94	0.35	2.4

Depth D meters	Temperature t °C	Salinity S ‰	Density σ_t	Particle content s km^{-1}	Hydrogen ion pH	Alkalinity millival/L	Carbon dioxide CO_2 ml/L	Oxygen O_2 ml/L	Phosphate PO_4—P μg-atoms/L	Silicat SiO_2 μg-atom
67	25.09	34.76	23.15	63		2.310		5.30	0.29	2.4
89	22.75	34.97	23.99	59		2.325		5.34	0.29	3.4
134	18.82	34.88	24.99	49		2.340		4.33	0.74	6.4
178	12.69	34.40	26.01	25		2.305		3.52	1.64	17.0
267	9.91	34.51	26.61	35		2.325		1.16	2.61	37.8
355	8.84	34.60	26.84	22		2.325		0.51	3.10	45.6
444	7.85	34.56	26.97	21		2.340		0.65	3.10	59.0
539	6.90	34.54	27.09	35		2.340		0.67	3.26	65.6
730	5.68	34.58	27.28	40		2.385		0.83	3.20	80.2
920	4.74	34.58	27.40	20		2.385		0.92	3.45	93.4
Station 128: December 18, 1947; LMT, 1337—1429, 1824—2100; 12° 16′ N, 166° 48′ W; depth bottom, 5380 m; win NE 5—6; sea, 2										
0	26.23	34.45	22.57	47		2.295		4.92	0.23	5.4
25	26.13	34.45	22.60	49		2.295		4.98	0.26	5.0
50	26.15	34.43	22.56	42		2.305		4.97	0.16	5.0
75	23.44	35.00	23.83	55		2.325		5.34	0.19	8.4
100	21.23	35.10	24.53	54		2.365		5.02	0.23	6.8
150	17.08	34.77	25.34	153		2.335		3.99	0.52	12.8
200	12.23	34.53	26.19	34		2.295		3.10	1.55	22.0
300	9.59	34.54	26.69	33		2.325		0.71	2.32	43.8
400	8.52	34.56	26.87	23		2.325		0.57	2.32	57.8
500	7.51	34.51	26.98	28		2.340		0.72	2.71	59.0
596	6.65	34.50	27.09	65		2.340		0.80	2.61	69.0
772	5.22	34.54	27.31	38		2.375		1.25	3.42	90.6
787 a)	5.30									
978	4.26	34.56	27.43	28		2.395		0.95	2.87	105.0
1448 a)	3.16									
1931	2.24	34.64	27.69	22		2.455		2.42	3.12	150.8
2414		34.67		44						
2897	1.70	34.68	27.76	19		2.455		3.01	3.00	162.0
3380		34.68		36						
3864	1.43	34.70	27.79	31		2.455		3.56	2.87	153.6
4346		34.69		26						
4830	1.27	34.69	27.80	21		2.445		4.38	2.64	138.2
Station 129: December 19, 1947; LMT, 1557—1651; 10° 10′ N, 168° 02′ W; depth bottom, 5310 m; wind, NE 10; sea,										
0	26.33	34.30	22.42	61		2.245		4.94	0.35	6.4
24	26.25	34.29	22.43	52		2.255		4.43	0.32	5.4
47	26.21	34.26	22.44	49		2.255		4.92	0.35	6.4
71	23.84	b)		58		2.325		5.28	0.26	5.4
95	20.67	35.12	24.69	64		2.335		4.69	0.39	8.8
142	15.32	34.60	25.61	72		2.320		3.35	1.32	15.4
192	10.89	34.38	26.33	37		2.310		2.17	2.42	35.2
291	9.67	34.60	26.71	33		2.320		0.56	2.90	49.4
390	8.80	34.60	26.85	27		2.325		0.57	3.06	49.4
489	8.00	34.63	27.01	32		2.325		0.62	3.16	59.4
586	6.96	34.55	27.08	35		2.335		0.65	3.26	66.4
779	5.56	34.56	27.27	33		2.370		0.81	3.42	86.2
973	4.68	34.60	27.41	35		2.390		0.98	3.29	97.4
Station 130: December 20, 1947; LMT, 1033—1245; 8° 40′ N, 169° 28′ W; depth bottom, 5450 m; wind, NE 9; sea,										
0	27.50	34.27	22.03	68	8.13	2.26	0.21	4.83	0.29	5.0
24 a)	27.51									
48	27.49	34.35	22.09	103	8.14			4.81	0.26	6.0
72	26.33	35.01	22.96	53	8.11	2.350	0.23	4.43	0.42	9.4
96	21.16	34.88	24.37	47	8.05	2.340	0.34	3.81	0.65	9.4

Depth D meters	Temperature t °C	Salinity S ‰	Density σ_t	Particle content s km^{-1}	Hydrogen ion pH	Alkalinity millival/L	Carbon dioxide CO_2 ml/L	Oxygen O_2 ml/L	Phosphate PO_4—P μg-atoms/L	Silicate SiO_2 μg-atoms/L
144	13.99	34.56	25.86	26	7.91	2.325	0.51	2.78	1.55	21.2
194	11.10	34.65	26.50	23	7.73	2.325	0.87	0.75	2.52	32.0
293	9.72	34.70	26.78	28	7.71			0.57	2.52	41.2
392	8.96	34.66	26.87	20	7.66	2.365	1.11	0.54	2.81	49.0
491	8.14	34.62	26.97	20	7.67	2.350	1.06	0.63	2.90	55.8
587	6.31	34.56	27.18	21	7.64	2.370	1.19	0.45	3.12	67.8
779	5.46	34.56	27.29	27	7.63	2.395	1.23	0.96	3.04	85.8
971	4.59	34.58	27.41	18	7.71	2.410	1.02	1.47	3.06	98.0
tation 131: December 21, 1947; LMT, 1337—1446; 6° 21′ N, 171° 52′ W; depth bottom, 5780 m; wind, SE 3; sea, 1										
0	28.48	34.61	21.96	49	7.90			4.73	0.16	9.8
25	28.05	34.63	22.12	68	8.10			4.63	0.16	9.8
50	28.14	34.71	22.15	54	8.07			4.73	0.16	10.6
75	27.28	34.75	22.45	45	8.08			4.67	0.19	10.6
101	24.04	34.96	23.62	46	8.02			3.87	0.26	21.6
151	14.09	34.47	25.78	26	7.89			3.01	0.52	66.4
197	10.76	34.68	26.59	24	7.65			0.52	0.90	116.0
291	9.30	34.69	26.85	22	7.66			0.97	1.06	114.6
384	8.57	34.63	26.92	18	7.65			1.18	1.10	125.8
478	7.92	34.63	27.02	18	7.65			1.02	1.29	131.4
575	6.93	34.56	27.09	19	7.58			0.92	1.58	138.2
769	5.60	34.55	27.26	25	7.59			1.00	1.94	139.8
963	4.66	34.53	27.37	18	7.59			1.45	2.13	135.4
tation 133: December 22, 1947; LMT, 1919—2324; 5° 00′ N, 172° 02′ W; depth bottom, 5390—5460 m; wind, E 6; sea, 3										
0	28.21	34.85	22.24	56	8.00	2.340	0.30	4.78	0.45	9.4
24	28.24	34.86	22.23	58	8.03	2.340	0.28	4.72	0.39	11.8
47	28.36	34.86	22.19	39		2.355		4.79	0.42	10.2
71	28.20	34.88	22.26	60	8.05	2.355	0.27	4.73	0.45	9.4
95	26.50	34.85	22.79	40	8.01	2.355	0.31	4.22	0.55	9.4
142	19.38	34.85	24.83	37	7.95	2.355	0.41	3.19	1.25	14.4
189	12.88	34.60	26.12	24	7.75	2.340	0.80	1.94	2.10	27.6
284	9.47	34.68	26.81	33		2.370		1.53	2.48	40.8
378	8.53	34.67	26.95	19		2.370		1.79	2.68	40.8
473	8.06	34.62	26.99	24		2.375		1.83	2.74	46.6
572	7.06	34.63	27.14	18		2.370		1.41	3.04	53.4
769	5.42	34.54	27.29	20		2.395		1.73	3.48	80.2
967	4.65	34.60	27.41	19		2.400		1.95	3.45	94.6
1407	3.19	34.60	27.56	26		2.445		1.99	3.42	126.4
1876	2.37	34.65	27.67	33		2.470		2.34	3.22	143.0
2814	1.73	34.68	27.76	34		2.475		3.05	3.04	154.2
3752	1.42	34.69	27.79	18		2.465		3.77	2.90	151.6
4690	1.25	34.72	27.83	27		2.445		4.48	2.64	133.4
5159	1.20	34.71	27.81	18		2.450		4.51	2.52	133.4
tation 135: December 24, 1947; LMT, 0118—0224; 2° 54′ N, 173° 17′ W; depth bottom, 5580 m; wind, SSE 3; sea, 1										
0	27.80	35.07	22.53	76	8.01			4.82	0.23	11.8
22	27.59	35.08	22.60	77	8.07	2.305	0.24	4.83	0.19	11.0
43	27.60	35.09	22.61	53	8.06	2.305	0.25	4.78	0.45	10.6
65	27.55	35.09	22.63	55	8.08	2.305	0.24		0.42	11.0
86	27.52	35.09	22.63	97	8.05	2.305	0.27	4.72	0.35	15.2
129	26.78	35.17	22.93	40	7.98	2.305	0.31	4.32	0.71	12.8
174	26.13	35.12	23.09	34	7.96	2.305	0.33	4.17	0.77	11.0
265	11.04	34.77	26.61	28	7.83				1.96	34.0
356	10.32	34.74	26.72	28	7.65	2.305	1.09	1.49	2.32	35.0
447	9.32	34.67	26.83	30	7.64	2.305	1.11		2.32	40.8
540	8.17	34.61	26.96	32	7.55	2.310	1.39	0.79	2.84	51.2
725	6.03	34.58	27.24	32	7.55	2.335	1.47		2.84	73.4
910	4.99	34.56	27.35	29	7.59	2.355	1.32	1.84	2.90	82.4

Depth D meters	Temperature t °C	Salinity S ‰	Density σ_t	Particle content s km^{-1}	Hydrogen ion pH	Alkalinity millival/L	Carbon dioxide CO_2 ml/L	Oxygen O_2 ml/L	Phosphate PO_4—P μg-atoms/L	Silicate SiO_3 μg-atoms
Station 137: December 25, 1947; LMT, 1336—1502; 0° 00′ 176° 32′ W; depth bottom, 5630 m; wind, ESE 7; sea,										
0	27.63	35.40	22.83	66		2.320		4.55	0.74	10.2
25	27.44	35.38	22.89	57		2.320		4.59	0.74	10.2
50	27.42	35.39	22.90	51				4.54	0.77	11.0
75	27.40	35.38	22.90	48		2.335		4.41	0.77	14.4
100	27.36	35.39	22.92	36		2.335		4.36	0.84	10.2
151	27.06	35.48	23.08	29		2.325		3.85	0.96	10.2
201	17.13	35.30	25.73	33		2.325		3.25	1.48	14.6
252	13.71	34.96	26.25	26		2.325		3.29	1.71	29.4
287	12.15	b)		20		2.305		3.10	2.04	29.4
382	10.16	34.76	26.75	20		2.305		1.49	2.81	42.8
478	8.97	34.72	26.92	20		2.320		1.22	3.16	42.8
572	7.69	34.59	27.03	18		2.320		2.02	3.16	50.0
761	5.75	34.56	27.25	19		2.340		1.83	3.12	72.4
949	4.68	34.55	27.37	33		2.415		2.05	3.04	94.6
1420	3.16	34.58	27.55	30		2.435		2.27	3.04	144.6
Station 138: December 26, 1947; LMT, 1353— ∽ 1800; 2° 37′ S, 177° 45′ W; depth bottom, 5670—5820 m; wind E 7; sea, 3										
0	28.89	35.65	22.61	53		2.375		4.69	0.48	11.8
23	28.70	35.63	22.66	52		2.365		4.76	0.48	10.2
46	28.88	35.66	22.62	58		2.365		4.69	0.52	10.2
70	28.66	35.64	22.68	52		2.375		4.70	0.52	10.2
93	27.91	35.61	22.91	44		2.375		4.53	0.74	11.0
139	27.16	35.63	23.16	28		2.365		4.31	0.87	11.4
188	20.24	35.75	25.29	36		2.375		3.01	1.35	12.8
237	13.26	35.10	26.44	30		2.350		2.71	2.04	22.0
286	10.92	34.86	26.70	34		2.335		2.87	2.19	26.8
384	9.44	34.73	26.85	27		2.335		2.41	2.58	32.8
482	8.54	34.68	26.95	31		2.325		1.79	2.90	36.8
580	7.64	34.62	27.05	27		2.325		1.62	3.06	47.8
776	5.63	34.57	27.28	24		2.385		1.92		95.8
972	4.56	34.56	27.39	25		2.390		2.21	3.20	89.0
1393	3.25	34.61	27.56	19		2.415		2.41	3.29	116.8
1875	2.39	34.62	27.65	22		2.480		2.63	3.26	170.1
2840	1.90	34.70	27.76	28		2.460		3.21	3.12	151.6
3805	1.41	34.69	27.79	18		2.455		3.89	2.84	148.6
4770	1.24	34.70	27.80	24		2.435		4.53	2.61	132.0
Station 143: January 3, 1948; LMT, 1457—1815; 0° 09′ S, 163° 23′ E; depth bottom 4450 m; wind, E 7; sea, 3										
0	29.27	34.44	21.58	64	8.06	2.255	0.24	4.65	0.26	5.0
25	29.27	34.44	21.58	69	8.09	2.285	0.22	4.64	0.26	5.0
50	29.21	34.71	21.79	52	8.09	2.305	0.22	4.68	0.26	5.0
75	29.08	34.87	21.96	57	8.11	2.335	0.21	4.58	0.35	5.0
99	29.05	35.10	22.14	45	8.06	2.335	0.25	4.52	0.45	5.0
149	20.63	35.32	24.85	46	8.04	2.340	0.30	3.27	1.10	10.2
198	17.25	35.10	25.55	50	7.99	2.355	0.38	3.41	1.10	13.6
247	15.44	35.11	25.98	20	7.97	2.350	0.42	3.49	1.32	13.6
297	12.62	35.02	26.51	30	7.92	2.325	0.45	3.43	1.58	18.6
396	10.16	34.75	26.74	28	7.77	2.325	0.79	1.73	2.39	34.4
495	8.61	34.65	26.92	27	7.70	2.325	0.96	1.73	2.64	36.8
590	7.21	34.59	27.09	31	7.71	2.350	0.97	2.15	2.64	45.6
781	5.63	34.54	27.26	22	7.71	2.350	0.98	2.33	2.87	63.4
972	4.84	34.55	27.36	20	7.71	2.385	0.98	2.23	2.90	76.8
1420	3.05	34.65	27.61	19	7.70	2.440	1.05	2.52	3.04	118.0
1912	2.30	34.65	27.68	15	7.72	2.445	0.93	2.73	3.04	136.0
2896	1.76	34.68	27.76	25	7.75	2.460	0.78	3.15	2.87	143.0
3880	1.42	34.68	27.78	13	7.75	2.445	0.69	3.88	2.71	139.0
4372	1.29	34.70	27.80	29	7.72	2.420	0.69	3.77	2.52	119.6

Depth D meters	Temperature t °C	Salinity S ‰	Density σ_t	Particle content s km^{-1}	Hydrogen ion pH	Alkalinity millival/L	Carbon dioxide CO_2 ml/L	Oxygen O_2 ml/L	Phosphate PO_4—P μg-atoms/L	Silicate SiO_2 μg-atoms/L
Station 150: January 12, 1948; LMT, 1650—2007; 2° 09′ N; 146° 52′ E; depth bottom, 4590 m; wind, SW 5; sea, 2										
0	29.22	34.69	21.78	46		2.310		4.58	0.29	4.2
25	29.04	34.72	21.86	52		2.310		4.63	0.29	3.0
50	29.42	34.85	21.84	45		2.320		4.59	0.29	3.0
75	29.25	35.11	22.08	59		2.340		4.50	0.45	4.2
99	28.31	35.22	22.48	44		2.335		4.03	0.65	5.0
149	25.14	35.42	23.63	33		2.355		3.41	0.93	5.0
199	18.43	34.76	25.00	28		2.340		3.67	0.87	11.0
249	12.22	34.63	26.28	25		2.340		2.89	1.67	23.0
298	9.55	34.58	26.72	27		2.350		2.29	2.26	32.8
398	8.89	34.66	26.89	45		2.370		2.77	2.56	34.0
497	8.19	34.64	26.99	36		2.355		2.92	2.64	34.0
592	7,50	34.58	27.04	26		2.350		2.91	2.78	39.8
781	5.67	34.55	27.25	19		2.370		f)	3.12	63.4
971	4.78	34.51	27.33	27		2.395		2.43	3.06	80.8
1466	2.92	34.65	27.63	20		2.440		2.40	3.16	118.0
1960	2.21	34.57	27.63	14		2.455		2.72	3.20	134.8
2910	1.60	34.66	27.75	20		2.460		3.34	2.90	140.4
3860	1.54	34.71	27.79	14		2.465		3,63	2.78	144.6
4335	c)	34.71		14		2.455		3.71	2.74	134.8
Station 157: January 19, 1948; LMT, 1400—1720; 2° 51′ N, 134° 57′ E; wind, N 5; sea, 1										
0	28.09	34.01	21.65	48	8.08			4.71	0.16	6,8
25	27.17	34.23	22.12	60	8.12	2.325	0.24	4.64	0.29	6.8
50	26.15	34.66	22.74	49	8.09	2.335	0.24	3.96	0.61	10.2
76	24.68	35.30	23.67	36	8.07	2.375	0.27	3.58	0.81	9.4
101	23.28	35.33	24.12	76	8.05	2.400	0.30	3.41	0.87	8.4
152	20.09	34.73	24.56	40	8.05	2.340	0.30	3.52	1.03	15.2
202	19.37	35.38	25.23	28	8.06	2.400	0.30	3.45	1.13	10.2
251	14.36	34.55	25.78	25	8.00	2.340	0.35	3.35	1.51	25.6
301	11.16	34.69	26.53	21	7.93	2.335	0.51	3.07	1.87	32.0
400	8.57	34.63	26.92	28	7.83	2.355	0.70	2.50	2.58	37.8
499	7.72	34.63	27.05	29	7.87			3.36	2.36	34.8
594	7.34	34.59	27.07	38	7.86	2.370	0.73	3.29	2.22	37.8
783	6.13	34.55	27.20	19	7.78	2.385	0.82	2.73	2.71	54.6
968	4.74	34.56	27.38	20	7.64	2.400	1.19	2.42	2.94	82.4
1452	3.20	34.63	27.59	17	7.73	2.445	0.93	2.55	3.00	115.4
1935	2.28	34.63	27.67	14	7.76	2.450	0.90	2.65	3.00	139.0
2903	1.60	34.70	27.78	17	7.80	2.480	0.69	3.31	2.74	143.0
3870	1.52	34.70	27.78	17	7.83	2.470	0.57	3.65	2.71	140.4
4354	0.96	34.69	27.83	19	7.81	2.470	0.56	3.79	2.78	140.4
Station 162: January 23, 1948; LMT, 1710—0216; 5° 23′ N, 127° 48′ E; depth bottom, 9090—9260 m; wind, NE 6; sea, 2										
0	27.83	34.28	21.93	50	8.16	2.255	0.18	4.71	0.19	4.2
24	27.66	34.32	22.02	67	8.19	2.280	0.17	4.71	0.19	4.2
48	25.41	34.94	23.02	67	8.17	2.320	0.19	4.49	0.35	5.0
72	23.13	35.04	23.94	46	8.12	2.335	0.23	4.17	0.45	6.4
95	18.30	34.78	25.04	95	8.09	2.335	0.36	3.73	0.93	10.2
143	12.70	34.50	26.08	68	7.97	2.335	0.46	3.05	1.64	23.0
197	10.03	34.47	26.55	53	7.91	2.360	0.57	2.70	1.94	40.8
247	10.18	34.77	26.76	34	7.91	2.360	0.55	3.27	1.90	26.8
294	10.09	34.76	26.76			2.350		3.29	1.94	23.8
297	10.03	34.77	26.78	38	7.87	2.360	0.63	3.44	1.87	23.0
387	8.48	34.62	26.93		7.82	2.370	0.74	2.37	2.36	36.8
480	7.87	34.58	26.99			2.375		2.30	2.54	45.6
493	7.62	34.56	27.01	48	7.80	2.335	0.78	2.38	2.39	44.8
589	d)	34.53		53	7.79	2.325		2.33	2.58	55.8

Depth D meters	Temperature t °C	Salinity S ‰	Density σ_t	Particle content s km^{-1}	Hydrogen ion pH	Alkalinity millival/L	Carbon dioxide CO_2 ml/L	Oxygen O_2 ml/L	Phosphate PO_4—P μg-atoms/L	Silicate SiO_2 μg-atoms
780	5.46	34.53	27.27	31	7.75	2.435	0.91	2.42	2.81	75.8
971	4.64	34.56	27.39	45	7.78	2,455	0.87	2.57	2.81	82.4
1410	3.28	34.60	27.55	24	7.77	2.420	0.84	2.39	2.96	123.8
1895		34.62		21	7.76	2.395		2.68	2.96	133.4
2380	1.75	34.66	27.74	17	7.79	2.455	0.76	3.21	2.74	137.6
2865		34.70		22	7.81	2.435		3.46	2.78	148.6
3350	1.51	34.77	27.84	15	7.82	2.435	0.62	3.55	2.71	140.4
3835		34.70		11	7.80	2.460		3.60	2.71	140.4
4320	c)	34.59		19	7.79	2.485		2.53	2.81	98.0
4805		34.69		15	7.80	2.485		3.09	2.78	144.6
5290	1.70	34.68	27.76	19	7.69	2.480	0.68	3.64	2.64	140.4
5771		34.68		20	7.76	2.470			2.94	151.6
6252	1.86	34.70	27.76	23	7.77	2.465	0.50	3.67	2.94	151.6
6733		34.69		27	7.78	2.485			2.87	151.6
7214	1.98	34.69	27.75	17	7.75	2.350	0.46	3.58	2.87	152.8
7695	2.10	34.69	27.74	20	7.73	2.360	0.46	3.69	2.87	151.6
8175	2.19	34.69	27.73	17	7.68	2.360	0.48	3.18	2.78	133.4
Station 173: February 4, 1948; LMT, 0846—1345; 7° 45′ S, 120° 30′ E; depth bottom, 5020 m; wind, SW 4; sea, 1										
0	29.47	32.16	19.80	153		2.040		4.69		
25	29.47	32.33	19.93	108		2.040		4.70		
50	28.09	33.48	21.24	122		2.190		4.22		
75	25.16	33.32	22.64	81		2.295		3.80		
99	23.00	33.52	22.83	212		2.320		3.64		
149	18.02	33.67	24.26	78				3.57		
198	16.01	33.64	24.72	56		2.340		3.44		
247	13,72	33.55	25.15	58		2.320		3.20		
296	11.10	33.52	25.62	77		2.320		2.86		
394	9.02	33.52	25.98	65		2.325		2.42		
492	7.27	33.54	26.25	95		2.355		2.25		
587	6.72	33.54	26.33	52		2.355		2.25		
777	5.48	33.58	26.51	83		2.385		2.24		
967	4.72	33.59	26.61	43		2.400		2.23		
1409	3.62	33.62	26.74	24		2.435		2.36		
1888	3.29	33.66	26.81	24		2.410		2.37		
2366	3.25	33.67	26.81	41				2.35		
2845		33.62		22		2.465		2.41		
3323	3.29	33.60	26.76	33				2.36		
3802		33.61		31		2.460		2.28		
4280	3.39	33.61	26.75	21				2.37		
4854	3.47	33.61	26.75	36		2.460		2.30		
Station 183, 184: February 24, 1948; LMT, 0905—1016, 1930—2424; 10° 19′ S, 109° 10′ E; depth bottom, 5883 m; wind, NE 5; sea, 2										
1	29.22	34.39	21.55	62		2.270		4.55	0.13	13.6
25	29.12	34.45	21.63	62		2.270		4.56	0.13	5.0
50	28.62	34.45	21.79	69		2.270		4.60	0.23	6.0
75	25.77	34.40	22.67	72		2.325		4.13	0.52	13.6
100	23.66	34.50	23.38	34		2.305		3.41	0.78	13.6
151	19.94	34.62	24.51	63		2.325		3.00	1.26	20.4
195	14.62	34.58	25.75	22		2.370		2.68	1.65	35.0
285	10.95	34.55	26.45	35		2.375		2.38	2.16	46.6
374	9.40	34.59	26.76	32		2.370		2.17	2.36	55.2
463	d)	34.61		64		2.375		2.17	2.36	60.0
552	7.72									
568	7.55	34.65	27.08	73		2.445		1.76	2.52	66.8
731	6.38	34.63	27.23	26		2.395		2.06	2.71	83.6
910 a)	5.10									

Depth D meters	Temperature t °C	Salinity S ‰	Density σ_t	Particle content s km^{-1}	Hydrogen ion pH	Alkalinity millival/L	Carbon dioxide CO_2 ml/L	Oxygen O_2 ml/L	Phosphate PO_4—P μg-atoms/L	Silicate SiO_2 μg-atoms/L
1042	4.68	34.62	27.42	40		2.475		2.24	3.04	103.0
1516	3.44	34.69	27.62	33		2.470		2.63	2.91	114.0
2464	1.95	34.73	27.79	46		2.450		3.62	2.65	118.0
3412	1.32	34.74	27.84	26		2.455		4.05	2.42	129.4
4360 a)	1.14									
5308	1.22	f)		37		2.455		4.54	2.52	122.4
5877	1.32	34.73	27.83	45		2.450		4.64	2.42	119.6
Station 190: February 28, 1948; LMT, 1905—2225; 11° 28′ S, 102° 14′ E; depth bottom, 5085 m; wind, W 4; sea, 1										
1	29.38	33.85	21.09	73	8.09	2.280	0.22	4.59	0.16	4.2
24	29.04	33.83	21.19	48	8.14	2.270	0.19	4.60	0.13	7.5
47	26.56	34.48	22.49	88	8.12	2.310	0.22	4.70	0.29	6.4
71	24.10	34.62	23.35	53	8.04			3.64	0.74	8.8
94	22.09	34.65	23.94	29	8.01	2.310	0.32	2.77	1.20	15.4
141	17.53	34.58	25.08	42	7.95	2.320	0.42	2.63	1.65	24.4
191	14.62	34.72	25.86	27	7.90	2.335	0.52	2.20	1.84	30.8
290	11.02	34.71	26.57	69	7.82	2.340	0.68	2.11	2.23	39.4
389	9.64	34.69	26.79	20	7.81	2.325	0.72	2.27	2.36	43.4
488	8.74	34.69	26.93	28	7.79	2.365	0.77	2.57	2.39	50.6
587	7.85	34.69	27.03	23	7.77	2.375	0.82	1.82	2.52	57.4
785	6.35	34.67	27.26	29	7.75	2.390	0.88	1.92	3.07	84.0
983	5.07	34.63	27.40	20	7.74	2.395	0.92	2.17	3.04	99.8
1665	3.12	34.74	27.69	15	7.65	2.420	1.15	2.92	3.00	116.0
2149		34.74		21	7.76	2.435		3.44	2.81	118.8
2633	1.83	34.74	27.80	18	7.78	2.445	0.73	3.80	2.62	126.4
3602	1.28	34.74	27.84	16	7.78	2.445	0.67	4.24	2.52	126.4
4086		34.73		14	7.65	2.440		4.47	2.71	129.8
4570	1.16	34.71	27.82	21	7.75	2.445	0.64	4.47	2.42	129.8
Station 196: March 2, 1948; LMT, 1330—1746; 11° 10′ S, 96° 15′ E; depth bottom, 4506 m; wind, ESE 4; sea, 1										
0	29.41	33.81	21.06	67	8.08	2.245	0.23	4.64	0.16	4.2
24	29.33	34.04	21.25	53	8.11	2.280	0.21	4.65	0.16	5.0
48	28.43	34.37	21.81	52	8.11	2.305	0.21	4.72	0.16	5.0
72	c)	34.52		57	8.10	2.320		4.53	0.32	4.2
96	23.93	34.53	23.33	38	8.04	2.320	0.29	3.40	0.81	4.2
144	18.18	34.66	24.98	28	7.94	2.335	0.42	2.47	1.62	10.2
191	13.76	34.57	25.92	32	7.90	2.305	0.52	2.50	1.71	23.8
286	10.79	34.64	26.55	26	7.81	2.365	0.71	2.10	2.16	32.8
381	9.72	34.76	26.88	26	7.78	2.370	0.80	2.08	2.20	39.8
476	8.79	34.69	26.93	28	7.77	2.385	0.82	2.06	2.62	55.8
571	7.85	34.66	27.04	26	7.76	2.390	0.84	1.85	2.71	62.2
761	6.44	34.66	27.24	25	7.71	2.400	0.97	1.82	2.81	80.2
951	5.44	34.65	27.36	27	7.71	2.420	1.00	1.99	2.84	94.6
1426	4.02	34.66	27.53	63	7.76	2.465	0.87	2.12	2.91	101.4
1876	2.81	34.75	27.72	15	7.70	2.450	0.96	3.10	2.94	119.6
2313		34.77		20	7.77			3.62		
2751	1.39	34.73	27.82	16	7.80	2.455	0.70	4.08	2.62	133.4
3189		34.68		20	7.68					
4370	1.12	34.71	27.82	22	7.84	2.450	0.53	4.58	2.52	133.4
4468		34.73		23	7.78					
4494	1.12	34.73	27.84	25	7.78		0.68			
Station 200: March 5, 1948; LMT, 0958—1219; 11° 01′ S, 88° 26′ E; depth bottom, 2258 m; wind, SSE 10; sea, 4										
0	28.60	34.59	21.91	53	8.02	2.305	0.28	4.63	0.32	6.0
23	28.57	34.62	21.94	28	8.10	2.320	0.22	4.64	0.19	3.4
46	28.52	34.64	21.97	47	8.08	2.320	0.23	4.53	0.26	5.0
70	25.59	34.89	23.10	35	8.05	2.325	0.27	3.79	0.65	7.6
93	21.89	34.87	24.17	39	7.91	2.325	0.43	2.55	1.26	12.8

Depth D meters	Temperature t °C	Salinity S ‰	Density σ_t	Particle content s km^{-1}	Hydrogen ion pH	Alkalinity millival/L	Carbon dioxide CO_2 ml/L	Oxygen O_2 ml/L	Phosphate PO_4—P μg-atoms/L	Silicate SiO_2 μg-atoms/L
139	17.54	34.76	25.22	22	7.75			2.15	1.52	23.0
187	13.89	34.68	25.98	23	7.85	2.340	0.59	2.22	1.78	30.4
283	10.08	34.67	26.57	27	7.79	2.340	0.74	2.17	2.07	37.8
378	9.88	34.81	26.84	26	7.79	2.370	0.78	2.32	1.94	32.8
474	8.90	34.76	26.96	17	7.78	2.355	0.78	2.32	2.58	52.4
572	7.62	34.70	27.11	25	7.73	2.385	0.91	3.31	2.71	69.0
768	5.98	34.70	27.33	15	7.69	2.385	1.04	1.76	2.91	86.8
963	5.22	34.64	27.39	40	7.70	2.435	1.03	2.06	2.81	103.0
1363	3.94	34.71	27.58	22	7.78	2.435	0.82	2.32	2.78	111.2
1808	2.65	34.74	27.73	20	7.80	2.440	0.76	3.12	2.71	121.0
2120	c)	34.74		27	7.83	2.450		3.59	2.69	126.4
2218	2.02	34.75	27.79	26	7.81	2.450	0.73	3.57	2.62	123.8
2245		34.75		33	7.85	2.470		3.41	2.39	125.2
Station 202: March 6, 1948; LMT, 1532—1635; 8° 26′ S, 88°′ 16 E; wind, NE 2; sea, 1										
0	29.80	34.11	21.15	69	8.12	2.235	0.20	3.72	0.16	5.0
23	27.70	34.39	22.06	52	8.19	2.245	0.17	4.78	0.23	4.2
47	24.74	35.12	23.53	95	8.13	2.325	0.22	3.83	0.71	6.8
71	20.53	35.04	24.66	38	8.01	2.320	0.34	2.06	1.32	17.0
94	17.18	34.76	25.31	47	7.98	2.310	0.39	2.12	1.55	22.0
141	13.89	34.80	26.07	29	7.90	2.310	0.50	1.59	1.94	26.8
190	12.00	34.80	26.46	32	7.90	2.325	0.54	1.70	2.16	31.2
289	10.51	34.88	26.79	35	7.88	2.325	0.57	1.58	2.16	31.2
387	9.54	34.85	26.93	35	7.87	2.335	0.62	1.76	2.13	32.8
486	8.75	34.85	27.05	26	7.87	2.340	0.61	1.62	2.39	44.8
585	d)	34.86		25	7.85	2.340		1.44	2.52	49.0
783	6.84	34.79	27.30	23	7.86	2.365	0.66		2.71	65.6
882		34.76		28	7.86			1.60		
981	5.77	b)		31	7.86	2.395		1.70	2.75	78.0
Station 204: March 7, 1948; LMT, 1441—1610; 6° 26′ S, 88° 53′ E; depth bottom, 3750 m; wind, 0; sea, 0										
0	29.34	34.51	21.61	64	8.09	2.305	0.22	4.62	0.26	5.0
25	27.36	35.09	22.68	50	8.12	2.335	0.23	4.94	0.32	4.2
50	24.77	35.38	23.72	54	8.05	2.360	0.29	3.68	0.81	9.4
74	23.18	35.31	24.13	41	8.00	2.320	0.32	2.86	1.20	10.2
148	15.09	34.77	25.79	33	7.87	2.310	0.54	1.82	1.87	26.8
195	13.09	34.82	26.25	28	7.82	2.295	0.64	1.74	2.10	31.2
290	11.22	34.93	26.70	33	7.78	2.335	0.75	1.48	2.16	28.4
385	10.30	34.90	26.85	36	7.79	2.340	0.75	1.65	2.16	31.2
480	9.36	34.84	26.96	26	7.78	2.340	0.78	1.74	2.36	35.8
578	8.50	34.83	27.08	29	7.73	2.360	0.91	1.45	2.62	46.6
773	6.89	34.76	27.27	28	7.67	2.370	1.07	1.46	2.94	72.4
968	5.56	34.70	27.38	23	7.69	2.380	1.03	1.79	2.81	88.0
1456	3.75	34.77	27.64	31	7.74	2.410	0.89	2.45	2.62	98.0
Station 205: March 8, 1948; LMT, 0913—1317; 4° 47′ S, 88° 18′ E; depth bottom, 4999 m; wind, 0; sea, 0										
0	29.25	34.94	21.95	46	8.09	2.320	0.22	4.71	0.29	6.0
23	28.68	34.87	22.09	30	8.12	2.305	0.20	4.62	0.26	7.6
45	28.00	35.27	22.62	39	8.12	2.340	0.20	4.66	0.36	6.0
68	26.21	35.51	23.38	43	8.08	2.355	0.25	4.13	0.61	9.4
90	23.41	35.17	23.96	35	7.97	2.325	0.35	2.49	1.26	12.6
134	15.81	34.87	25.71	18	7.87	2.320	0.56	1.77	1.94	27.6
183	12.66	34.91	26.41	21	7.81	2.325	0.67	1.60	2.07	29.2
282	10.86	34.95	26.79	19	7.78	2.325	0.76	1.73	2.10	30.4
380	9.83	34.90	26.92	17	7.75	2.350	0.85	1.53	2.20	32.8
479	9.11	34.87	27.02	20	7.74	2.350	0.88	1.73	2.36	37.8
577	8.25	34.83	27.12	23	7.67	2.350	1.05	1.43	3.00	55.8

Depth D meters	Temperature t °C	Salinity S ‰	Density σ_t	Particle content s km^{-1}	Hydrogen ion pH	Alkalinity millival/L	Carbon dioxide CO_2 ml/L	Oxygen O_2 ml/L	Phosphate PO_4—P μg-atoms/L	Silicate SiO_2 μg-atoms/L
772	7.11	34.85	27.31	25	7.64	2.370	1.13	1.36	2.87	71.2
968	5.89	34.79	27.42	20	7.65	2.390	1.12	1.57	2.87	88.0
1539	3.66	34.79	27.67	30	7.68	2.435	1.03	2.47	2.81	105.4
2019	2.54	34.77	27.76	20	7.76	2.435	0.82	3.17	2.81	116.6
2499	1.93	34.76	27.81	25	7.77	2.440	0.78	3.58	2.71	119.6
3458	1.42	34.73	27.82	45	7.77	2.460	0.68	4.02	2.55	136.0
4418	1.40	34.72	27.81	33	7.75	2.455	0.65	4.11	2.65	130.6
4956	1.37	34.73	27.83	35	7.71	2.445	0.67	4.29	2.55	125.0
4985		34.73		65	7.73	2.450		3.52	2.55	114.0
Station 206: March 9, 1948; LMT, 1425—1541; 2° 33′ S, 88° 19′ E; depth bottom, 4820 m; wind, ENE 2; sea, 1										
0	29.64	35.08	21.93	50	8.08	2.375	0.24	4.55	0.32	6,8
25	28.55	35.01	22.23	32	8.13	2.340	0.20	4.63	0.29	7.6
50	28.16	35.06	22.40	84	8.15	2.355	0.20	4.56	0.32	8.4
75	25.56	35.15	23.30	42	8.08	2.370	0.26	3.38	0.87	11.0
100	21.49	35.09	24.44	28	7.99	2.375	0.34	2.43	1.49	13.6
150	13.61	35.04	26.32	18	7.84	2.375	0.64	1.59	2.10	25.6
198	12.43	35.04	26.55	30	7.83	2.375	0.67	1.70	2.10	32.8
295	11.07	35.01	26.79	29	7.84	2.390	0.67	2.19	1.94	32.0
391	10.09	34.95	26.92	28	7.83			2.18	2.04	30.4
488	9.37	34.93	27.02	23	7.79			1.86	2.33	39.8
586	8.95	34.96	27.11	29	7.73			1.50	2.52	56.8
783	7.65	34.91	27.27	36	7.69			1.64	2.84	66.8
980	6.65	34.93	27.43	25	7.69			1.72	2.78	78.0
Station 207: March 10, 1948; LMT, 1403—1851; 0° 01′ S, 88° 18′ E; depth bottom, 4486 m; wind, SSW 3; sea, 1										
0	30.11	34.48	21.33	61	8.11	2.295	0.20	4.59	0.23	6.0
23	28.98	34.85	21.98	35	8.16	2.310	0.18	4.54	0.29	6.0
47	28.51	34.99	22.24	54	8.17	2.335	0.17	4.50	0.32	6.0
70	26.18	35.56	23.42	35	8.11	2.370	0.23	3.82	0.71	8.4
93	22.40	35.36	24.40	35	8.00	2.350	0.32	2.34	1.29	13.6
140	15.10	35.15	26.09	21	7.88	2.320	0.55	1.45	1.87	23.8
190	12.25	35.09	26.63	19	7.86			1.99	1.97	24.8
290	11.59	35.07	26.73	21	7.88	2.310	0.58	1.90	1.91	24.8
389	10.37	35.00	26.92	27	7.84	2.360	0.66	1.89	2.07	31.2
488	9.99	34.99	26.98	23	7.81	2.340	0.71	1.57	2.33	35.8
584	9.06	34.98	27.11	26	7.75	2.365	0.85	1.38	2.52	45.6
777	7.90	34.99	27.30	28	7.72	2.390	0.92	1.02	3.13	71.2
969	6.80	34.97	27.44	28	7.73	2.390	0.91	1.14	3.30	86.8
1443	4.53	34.85	27.63	17	7.71	2.435	0.95	2.01	3.20	108.4
1926	2.83	34.78	27.75	17	7.70	2.455	0.95	2.90	3.52	122.4
2883	1.76	34.75	27.81	17	7.79	2.450	0.71	3.63	2.91	133.4
3857	1.33	34.73	27.83	18	7.81	2.475	0.65	3.89	2.81	145.8
4340	1.38	34.73	27.82	25	7.82	2.460	0.57	4.07	2.68	144.6
4446	1.40	34.73	27.82	13	7.80	2.470	0.56	4.08	2.65	144.6
4475	1.40	34.74	27.83	33	7.79	2.450	0.55	3.69	2.55	141.8
Station 208: March 11, 1948; LMT, 1955—2100; 1° 56′ N, 88° 12′ E; depth bottom, 4290 m; wind, 0; sea, 1										
0	29.82	34.24	21.23	47	8.08	2.310	0.23	4.34	1.26	7.4
25	28.93	34.97	22.08	41	8.12	2.365	0.21	4.72	0.32	8.4
50	28.01	35.00	22.41	53	8.12	2.370	0.21	4.42	0.39	8.4
74	26.78	34.98	22.80	48	8.08	2.365	0.25	3.68	0.71	8.4
98	21.59	35.23	24.52	44	7.93	2.375	0.41	2.18	1.58	17.0
148	14.75	35,09	26.12	18	7.79	2.355	0.40	1.11	2.36	25.6
195	13.14	35.11	26.47	31	7.78	2.375	0.43	1.41	2.20	26.8
290	11.55	35.07	26.74	22	7.70	2.395	0.96	1.44	2.20	28.4
384	10.72	35.05	26.89	30	7.71			0.96	2.42	36.8

Depth D meters	Temperature t °C	Salinity S ‰	Density σ_t	Particle content s km^{-1}	Hydrogen ion pH	Alkalinity millival/L	Carbon dioxide CO_2 ml/L	Oxygen O_2 ml/L	Phosphate PO_4–P μg-atoms/L	Silicate SiO_2 μg-atoms
479	10.13	35.04	26.97	26	7.69			0.91	2.55	42.8
579	9.42	35.04	27.10	22	7.72			1.06	2.65	45.6
778	8.01	35.01	27.30	22	7.69			0.91	2.84	66.8
977	6.74	34.95	27.43	24	7.70			1.18	2.88	83.6
Station 211: March 14, 1948; LMT, 0919—1410; 4° 36′ N, 82° 36′ E; depth bottom 4133 m; wind, NNW 1—2; sea,										
0	28.82	33.87	21.30	40	8.14	2.420	0.21	4.55	0.23	5.0
24	28.60	33.98	21.45	31	8.17	2.420	0.19	4.62	0.19	5.0
49	28.56	34.91	22.15	37	8.17	2.420	0.19	4.56	0.29	5.0
73	26.38	35.46	23.27	40	8.03	2.420	0.29	3.59	0.74	8.4
97	21.63	34.87	24.24	27	7.91	2.380	0.43	1.67	1.65	15.2
146	15.01	34.93	25.94	26	7.76	2.380	0.76	0.71	2.29	32.0
195	12.75	35.04	26.49	28	7.71	2.410	0.93	0.61	2.39	32.6
292	11.34	35.07	26.78	28	7.79	2.405	0.76	1.59	2.16	28.4
389	10.65	35.06	26.90	24	7.74			0.59	2.42	41.8
487	10.20	35.06	26.98	21	7.74			1.20	2.42	37.8
584	9.50	35.06	27.09	22	7.73			1.04	2.62	44.8
778	8.20	35.00	27.27	22	7.65			0.80	3.10	65.6
973	6.86	34.95	27.42	21	7.65			0.97	3.10	81.2
1576	4.19	34.84	27.66	10	7.64			2.00	2.97	108.4
2059	2.70	34.78	27.76	22	7.75			2.72	2.81	129.4
3027	1.63	34.73	27.81	14	7.78			3.48	2.62	144.6
3995	1.37	34.72	27.81	22	7.79	2.500	0.62	3.91	2.55	130.6
4092	1.34	34.71	27.81	19	7.86	2.500	0.53	3.89	2.49	132.0
4121		34.76		50	7.89	2.525		3.38	2.49	126.4
Station 213: March 28, 1948; LMT, 1340—1643; 4° 12′ N, 77° 28′ E; depth bottom, 3120 m; wind, E 4; sea, 2										
0	29.79	34.90	21.74	83	8.13	2.380	0.20	4.23	0.49	5.0
25	29.46	34.92	21.86	75	8.15			4.55	0.52	5.0
49	28.44	35.01	22.28	113	8.16	2.380	0.19	4.55	0.55	5.0
73	26.75	35.21	22.98	93	8.11			3.54	1.00	6.0
96	24.12	35.18	23.76	71	8.01	2.385	0.31	2.42	1.59	11.8
140	16.31	34.87	25.60	54	7.81	2.230	0.61	0.78	2.71	28.4
190	13.60	34.99	26.28	33	7.72	2.390	0.87	0.48	2.75	32.8
289	11.55	35.06	26.73	37	7.72			0.71	2.78	31.6
388	10.59	35.07	26.91	30	7.74			0.94	2.78	36.8
487	10.00	35.06	27.01	44	7.75			1.03	3.39	45.6
586	9.38	35.04	27.11	25	7.69			0.70	3.59	52.4
785	8.07	35.02	27.30	33	7.67			0.82	3.46	74.6
983	6.63	34.91	27.42	48	7.67			1.04	3.59	88.0
1540	4.12	34.86	27.68	20	7.73	2.460	0.92	2.14	3.75	112.6
2018	2.68	34.77	27.75	23	7.77	2.470	0.81	2.93	3.65	130.6
2975	1.71	34.73	27.80	35	7.80	2.495	0.69	3.46	3.52	141.8
3071	1.48	34.75	27.82	42	7.89	2.515	0.56	3.64	3.23	141.8
3096	1.86			44	8.00					
3107				24	8.11					
3113		34.95	27.97	128	7.97	2.450		0.87	2.13	28.4
Station 216: March 31, 1948; LMT, 2333—0310; 0° 04′ N, 74° 53′ E; depth bottom, 4268—4286 m; wind, NW 5; sea,										
0	29.39	35.15	22.07	41	8.00	2.315	0.29	4.54	0.61	4.2
24	29.34	35.13	22.07	48	8.08	2.305	0.23	4.54	0.55	4.2
48	28.94	35.20	22.26	60	8.08	2.305	0.23	4.59	0.61	4.2
72	23.08	35.41	24.25	48	8.01	2.335	0.32	3.53	1.42	9.4
97	22.38	35.36	24.41	43	8.01	2.335	0.32	3.40	1.42	10.2
145	18.42	35.23	25.36	24	7.88	2.325	0.50	2.04	2.13	17.0
193	13.62	35.14	26.40	40	7.83	2.305	0.61	2.03	2.36	21.2
290	11.67	35.10	26.76	39	7.81	2.350	0.70	2.29	2.55	23.0
386	10.61	35.04	26.90	28	7.77			1.93	2.71	30.4

Depth D meters	Temperature t °C	Salinity S ‰	Density σ_t	Particle content s km^{-1}	Hydrogen ion pH	Alkalinity millival/L	Carbon dioxide CO_2 ml/L	Oxygen O_2 ml/L	Phosphate PO_4–P μg-atoms/L	Silicate SiO_2 μg-atoms/L
483	9.88	34.98	26.98	29	7.75			1.94	2.88	33.8
581	9.29	35.01	27.10	25	7.70			1.46	3.46	44.8
778 e)	8.18	35.00	27.27	25	7.64			1.08	3.55	62.2
975 e)	6.90	34.97	27.42	24	7.64			1.14	3.81	78.0
1398	4.60	34.90	27.67	23	7.62			1.98	3.72	99.1
1884	2.72	34.82	27.79	22	7.73			2.96	3.59	118.0
2855	1.73	34.73	27.80	51	7.78			3.64	3.41	130.6
3827	1.37	34.73	27.82	43	7.78	2.475	0.66	3.96	3.26	134.8
4215	1.37	34.73	27.83	25	7.76	2.390	0.64	4.12	3.39	134.8
4241	1.33			19	7.75	2.390		4.09	3.59	129.4
4258		34.75		66	7.77	2.390		3.59	3.42	123.8
Station 220: April 2, 1948; LMT, 0856—1215; 1° 22′ S, 70° 28′ E; depth bottom, 3885 m; wind, NW 3; sea, 1										
0	29.22	35.15	22.12	81	8.07	2.305	0.24	4.55	0.52	4.2
25	28.80	35.14	22.26	46	8.16	2.305	0.18	4.63	0.45	4.2
50	28.30	35.18	22.45	53	8.16	2.285	0.18	4.63	0.52	4.2
75	23.38	35.29	24.06	50	8.08	2.305	0.27	3.58	1.03	7.5
100	21.37	35.27	24.62	38	8.03	2.325	0.31	2.82	1.39	11.0
149	18.31	35.22	25.38	34	7.99	2.325	0.37	2.25	1.68	14.4
198	13.73	35.10	26.34	30	7.91	2.325	0.51	1.96	2.23	20.4
295	11.12	35.03	26.80	24	7.91	2.325	0.54	2.82	2.16	19.4
392	10.43	35.01	26.90	29	7.90			2.48	2.23	25.6
489	9.60	35.00	27.04	24	7.81			1.62	2.91	36.8
587	9.14	35.02	27.12	23	7.77			1.34	3.07	43.8
783	8.20	35.00	27.27	21	7.76			1.27	3.49	63.4
979	6.70	34.96	27.44	26	7.72			1.24	3.59	81.2
1489	4.24	34.86	27.67	27	7.60			2.19	3.62	101.4
1968	2.62	34.77	27.76	18	7.81			3.03	3.52	116.8
2447				18	7.78					
2925	1.72	34.74	27.81	20	7.80			3.78	3.62	123.8
3404				27	7.83					
3835		34.73		26	7.80	2.425		3.97	3.30	123.8
3860	1.58	34.73	27.81	25	7.78	2.425	0.64	4.01	3.20	123.8
3866	1.67	34.73	27.81	20	7.78	2.430	0.64	4.03	3.13	123.8
3871	1.66	34.75	27.82	26	7.77	2.430	0.62	3.99	3.10	118.0
3877		34.75		43	7.81	2.455		3.68	3.04	112.6
Station 223: April 4, 1948; LMT, 1313—1708; 1° 19′ S, 66° 16′ E; depth bottom, 4344 m; wind, 0; sea, 1										
0	30.14	35.08	21.76	52	7.98	2.345	0.31	4.66	0.52	4.2
23	29.03	35.12	22.16	38	8.11			4.57	0.49	4.2
46	28.48	35.16	22.38	42	8.11	2.340	0.21	4.60	0.55	4.2
68	23.61	35.39	24.08	34	8.05			3.88	1.00	6.0
91	21.13	35.26	24.68	32	8.02	2.360	0.31	3.01	1.29	10.2
137	17.57	35.20	25.55	26	7.89			1.91	1.97	14.4
186	14.09	35.13	26.29	32	7.83	2.315	0.64	2.25	2.00	16.1
285	11.41	35.01	26.72	25	7.90			2.84	2.07	16.1
383	10.14	34.95	26.91	25	7.90			2.94	2.13	21.2
482	9.49	34.97	27.03	31	7.79	2.340	0.76	2.07	2.62	29.2
578	9.38	35.01	27.08	22	7.73			1.54	2.81	32.8
770	8.22	35.01	27.27	21	7.70			1.28	3.39	66.8
965	6.90	34.98	27.43	24	7.68	2.400	1.03	1.17	3.59	79.0
1544	3.85	34.80	27.66	26	7.60			2.49	3.62	107.0
2026	2.49	34.77	27.78	18	7.70			3.16	3.41	118.0
2996	1.72	34.74	27.82	21	7.76	2.405	0.75	3.76	3.33	122.4
3956	1.52	34.74	27.83	23	7.74			4.05	3.13	126.8
4294	1.51	34.73	27.82	19	7.56	2.445	1.04	4.09	3.13	130.6
4319		34.73		21	7.68			4.09	3.23	132.0

Depth D meters	Temperature t °C	Salinity S ‰	Density σ_t	Particle content s km^{-1}	Hydrogen ion pH	Alkalinity millival/L	Carbon CO_2 ml/L dioxide	Oxygen O_2 ml/L	Phosphate PO_4–P μg-atoms/L	Silicate SIO_2 μg-atoms L
4325	1.53	34.73	27.82	19	7.70	2.415	0.73	4.07	3.04	129.4
4331		34.74		34	7.74			4.07	3.04	126.8
4337	1.55	34.73	27.82	49	7.74	2.420	0.67	3.66	2.65	126.8
Station 225: April 6, 1948; LMT, 1314—1732; 1° 22′ S, 62° 38′ E; depth bottom, 4658 m; wind, W 1; sea, 1										
0	29.95	35.19	21.90	46		2.380		4.57	0.52	6.0
23	29.10	35.18	22.19	37						
45	27.52	35.33	22.81	64		2.305		4.73	0.61	6.7
68	22.39	35.34	24.38	39				3.82	1.10	10.2
90	19.67	35.30	25.09	26		2.335		2.88	1.68	14.2
135	17.62	35.24	25.57	24				1.92	2.00	19.4
184	14.37	35.15	26.24	22		2.325		2.54	2.13	21.2
283	11.30	35.05	26.78	25				2.86	2.29	23.8
382	10.75	b)		30						
480	9.59	34.98	27.02	16		2.335		2.27	2.71	32.8
578	9.27	35.01	27.09	15				1.66	3.00	41.8
775	8.09	35.00	27.28	21				1.21	3.88	70.0
972	7.01	34.99	27.43	20		2.405		1.18	3.99	85.1
1540	4.21	34.83	27.65	15				2.31	3.88	105.6
2019	2.68	34.76	27.75	14						
2978 a)	1.74									
3937	1.54									
4608		34.71		31		2.460		4.22	3.46	141.8
4635	1.35	34.71	27.83	22				4.26	3.46	133.4
4641		34.69				2.445		4.16	3.46	133.4
4646	1.32									
Station 227: April 8, 1948; LMT, 1251—1303; 2° 13′ S, 58° 43′ E; wind, SSW 4; sea, 1										
0		35.35		59						
10				45						
20		35.33		34						
29				39						
39				44						
48		35.32		44						
57				64						
65		35.33		52						
76				42						
92		35.33		57						
Station 228: April 9, 1948; LMT, 0914—1210; 3° 18′ S, 56° 47′ E; depth bottom, 4016 m; wind, 0; sea, 0										
3734	1.48	34.69	27.78							
3977	1.37	34.71	27.80							
3995	1.32	34.71	27.81							
4000 a)	1.36									
Station 232: April 17, 1948; LMT, 1753—2216; 0° 01′ S, 54° 16′ E; depth bottom, 4622 m; wind, SSE 3; sea, 1										
1	29.45	35.47	22.28	102	8.04	2.385	0.27	4.68	0.49	5.0
22	28.47	35.42	22.57	129	8.09	2.385	0.23	4.76	0.61	10.2
44	27,52	35.41	22.88	69	8.13	2.385	0.21	4.77	0.61	5.0
66	26.06	35.39	23.33	79	8.13	2.350	0.21	4.57	0.65	6.0
87 a)	24.29									
131	17.74	35.28	25.56	33	7.99	2.350	0.37	2.76	1.68	14.4
175	14.48	35.18	26.24	66	7.96	2.350	0.44	2.73	1.84	16.2
262	12.19	35.15	26.68	47	8.02	2.355	0.40	3.34	1.84	17.8
350	10.48	35.00	26.89	48	7.91			2.85	2.23	23.0
437	9.90	35.01	27.00	28	7.83			2.12	2.62	31.2

Depth D meters	Temperature t °C	Salinity S ‰	Density σ_t	Particle content s km^{-1}	Hydrogen ion pH	Alkalinity millival/L	Carbon dioxide CO_2 ml/L	Oxygen O_2 ml/L	Phosphate PO_4–P μg-atoms/L	Silicate SiO_2 μg-atoms/L
530	9.62	35.02	27.05	25	7.77			1.71	3.00	41.8
716	8.19	35.04	27.29	44	7.73			1.18	3.13	57.8
905	7.44	35.04	27.40	52	7.70			2.43	3.84	78.0
1462	4.25	34.85	27.66	17	7.59			2.21	3.92	104.2
1940	2.77	34.80	27.77	25	7.81			3.00	3.65	116.8
2885 a)	1.78									
3851	1.44	b)		19	7.65			4.08	3.49	130.6
4615	1.29	34.72	27.83	23	7.75	2.450	0.65	4.34	3.24	129.4
Station 235: April 20, 1948; LMT, 1241—1337, 1840—2130; 7° 14′ N, 52° 49′ E; depth bottom, 5073 m; wind, E 4; sea, 2										
1	29.42	35.80	22.53	81	8.05	2.425	0.26	4.54	0.58	2.4
25	29.11	b)		82	8.08	2.410		4.54	0.61	2.4
49	28.20	36.09	23.17	129	8.11	2.450	0.22	4.74	0.61	3.4
74	24.30	35.90	24.25	78	8.03	2.410	0.27	3.50	1.16	6.8
99	23.47	35.90	24.49	42	7.99	2.410	0.34	3.06	1.49	6.8
148	17.47	35.44	25.75	36	7.80	2.390	0.65	1.09	2.39	18.6
198	13.89	35.25	26.42	32	7.82	2.370	0.65	1.80	2.39	23.8
296	12.32	35.30	26.78	26	7.76	2.385	0.73	1.37	2.71	29.4
395	11.60	35.34	26.95	39	7.75			1.07	2.52	31.2
494	11.08	35.32	27.02	38	7.73			0.99	2.55	35.8
593	10.87	35.38	27.12	32	7.69			0.75	3.00	39.8
790	10.24	35.47	27.29	31	7.66			0.45	3.20	55.8
988	~8.5 d)	35.36	~27.50	32	7.65			0.55	3.68	71.2
1607	3.90	34.83	27.68	30	7.59			2.15	3.68	107.0
2088	2.51	34.80	27.79	24	7.67			2.92	3.33	127.8
3051	1.78	34.93	27.95	16				3.58	3.42	125.0
4013	1.46	34.71	27.80	20	7.64			4.04	3.39	121.0
4976	1.30	34.71	27.81	27	7.64	2.465	0.82	4.28	3.23	121.0
5050		34.71		41	7.66	2.470		4.25	3.20	121.0
5055	1.36	34.69	27.80	37	7.67	2.470	0.76	4.27	3.17	121.0
5061		34.69		49	7.67	2.460		4.22	3.07	119.6
5066	1.38	34.83	27.90	42	7.67	2.450	0.73	3.40	3.07	104.2
Station 240: April 22, 1948; LMT, 1849—2207; 10° 23′ N, 52° 22′ E; depth bottom, 3793 m; wind, E 2; sea, 1										
1	29.51	35.32	22.15	69	8.09	2.395	0.23	4.58	0.55	4.2
23	29.27	35.32	22.23	50	8.17			4.60	0.55	5.0
47	27.37	35.56	23.04	69	8.18	2.400	0.18	4.78	0.65	5.0
70	26.44	35.70	23.45	50	8.13			4.54	0.78	5.0
94	25.22	36.25	24.23	35	8.14	2.445	0.22	4.38	1.03	5.0
141	20.52	35.66	25.13	28	7.97	2.405	0.38	1.91	2.13	14.4
188	16.50	35.43	25.97	30	7.89	2.385	0.52	0.95	2.71	20.4
281	13.25	35.38	26.65	21	7.79	2.385	0.72	0.84	2.84	27.6
375	11.45	35.33	26.96	29	7.64			1.25	2.71	32.0
469	10.72	35.24	27.03	21	7.80			1.19	2.94	36.8
567	10.26	35.23	27.10	21	7.78			1.06	3.13	41.8
763	10.11	35.40	27.26	26	7.73			0.53	3.33	52.4
960	9.27	35.38	27.39	30	7.73			0.57	3.68	69.0
1292	6.49	35.09	27.58	23	7.58			1.07	3.72	89.0
1532	4.45	34.93	27.70	22	7.76			1.84	3.62	105.6
2013	f)	34.83		16	7.77			2.66	3.62	134.8
2974	1.84	34.76	27.81	22	7.83	2.475	0.63	3.39	3.41	134.8
3743	1.52	34.76	27.83	20	7.85	2.430	0.55	3.91	3.33	130.6
3768		f)		21	7.83	2.470		3.86	3.33	130.6
3774	1.54	34.75	27.82	27	7.83	2.490	0.58	3.89	3.17	126.4
3779		34.74		45	7.84	2.480		3.88	3.00	123.0
3785	1.55	34.74	27.82	44	7.85	2.485	0.56	3.68	3.13	123.0

Depth D meters	Temperature t °C	Salinity S ‰	Density σ_t	Particle content s km^{-1}	Hydrogen ion pH	Alkalinity millival/L	Carbon dioxide CO_2 ml/L	Oxygen O_2 ml/L	Phosphate PO_4—P μg-atoms/L	Silica SiO μg-ato
Station 243: April 24, 1948; LMT, 1907—2157; 12° 45′ N, 48° 26′ E; depth bottom, 2540 m; wind, ENE 1; sea,										
0	28.24	36.25	23.27	69	8.09	2.275	0.22	4.64	0.48	4.
24	25.15	36.03	24.09	85	8.18			5.29	0.65	2.
48	22.64	35.86	24.71	50	8.03	2.340	0.31	2.71	1.71	10.
72	19.47	35.73	25.47	27	7.82			0.92	2.56	16.
95	17.48	35.55	25.83	20	7.69	2.355	0.87	0.64	2.71	22.
143	16.43	35.59	26.11	21	7.68			0.24	2.71	24.
191	15.15	35.52	26.36	23	7.76	2.365	0.74	0.32	2.87	24.
286	15.58	35.58	26.30	24	7.71			0.48	2.81	30.
382	13.08	35.64	26.89	29	7.72	2.390	0.85	0.63	2.68	30.
477	12.83	35.72	27.00	22	7.70			0.59	2.78	34.
573	12.17	35.73	27.14	28	7.67			0.50	3.26	44.
766	11.22	35.76	27.35	20	7.62	2.370	1.09	0.43	3.29	59.
958	10.13	35.72	27.51	27	7.62			0.42	3.57	67.
1188	> 9 d)	35.54		25	7.64			0.52		
1425	5.88	35.11	27.68	20	7.71			1.03	3.67	123.
1900	3.47	34.85	27.74	56	7.70	2.430	0.95	1.87	3.51	137.
2375	2.90	34.81	27.76	35	7.74	2.480	0.83	2.13	3.57	140.
Station 244: April 25, 1948; LMT, 2222—2407; 12° 10′ N, 45° 17′ E; depth bottom, 911 m; wind, NE 3; sea, 2										
0	28.18	36.27	23.31	59	8.08	2.430	0.25	4.58	0.71	6.
24	27.74	36.27	23.46	46	8.16			4.61	0.71	7.
47	25.03	36.14	24.21	57	8.12	2.430	0.22	3.97	1.29	7.
71	24.12	35.11	24.46	44	8.09			3.55	1.55	7.
94	22.24	35.85	24.76	25	7.62	2.420	0.98	2.30	2.06	11.
142	17.50	35.63	25.89	27	7.49			0.42	3.00	23.
189	15.47	35.55	26.30	30	7.45	2.400	1.66	0.30	3.26	25.
283	13.90	35.63	26.71	21	7.47			0.47	3.33	31.
378	13.41	35.77	26.93	16	7.57	2.405	1.28	0.58	3.42	31.
472	13.73	f)		32	7.58			0.61	3.12	34.
566	13.55	36.15	27.18	26	7.57	2.395	1.22	0.52	3.20	38.
661	13.28	36.71	27.29	21	7.50			0.49	3.16	43.
755	12.32	36.11	27.41	21	7.52			0.43	3.42	49.
861	12.74	36.33	27.49	37	7.61	2.400	1.09	0.47	3.38	52.
880	12.79	36.40	27.54	26	7.73	2.400	0.79	0.49	3.22	60.
892	12.80	36.35	27.49	27	7.73	2.400	0.79	0.50	3.22	60.
898	12.65	36.34	27.52	29	7.48	2.420	1.51	0.49	3.16	60.
904	12.58			35	7.53	2.450		0.49	3.20	60.
Station 246: April 26, 1948; LMT, 2130—2225; 12° 33′ N, 43° 20′ E; depth bottom, 330 m; wind, WNW 4; sea,										
17	28.44	36.37	23.31	73	8.18	2.425	0.17	4.62	0.74	6.
42		36.39		56		2.440		4.46	0.87	6.
64	27.43			48						
88	26.58	37.26	24.57	42	8.19	2.430	0.17	3.69	1.13	8.
113	26.00	37.72	25.11	41	8.18			3.38	1.13	8.
135	25.76	38.05	25.43	33	8.17			3.19	1.20	8.
158	24.53	39.17	26.67	27	8.14	2.475	0.15	2.46	1.29	9.
182	23.21	39.95	27.65	29	8.07	2.500	0.27	1.78	1.35	11.
206	23.10	39.99	27.70	29	8.05			1.79	1.58	11.
229	23.05	39.99	27.71	40	8.02			1.69	1.48	12.
253	23.01	40.01	27.75	32	8.03	2.505	0.31	1.63	1.48	12.
276	22.98	40.04	27.78	45	8.03			1.60	1.55	12.
300	23.04	40.08	27.79	28	8.02	2.505	0.31	1.60	1.51	12.
323	22.97	40.07	27.81	20	8.03	2.505	0.31	1.75	1.51	12.

Depth D meters	Temperature t °C	Salinity S ‰	Density σ_t	Particle content s km^{-1}	Hydrogen ion pH	Alkalinity millival/L	Carbon dioxide CO_2 ml/L	Oxygen O_2 ml/L	Phosphate PO_4—P μg-atoms/L	Silicate SiO_2 μg-atoms/L
Station 247: April 27, 1948; LMT, 0650—0741; 13° 30′ N, 42° 48′ E; depth bottom, 190 m; wind, NW 2; sea, 1										
4	28.10	37.16	24.01	53	8.16	2.460	0.18	4.47	0.58	9.4
16	28.17	36.40	23.42	48	8.21			4.47		
40	27.64	36.54	23.69	52	8.21	2.460	0.16	4.26	0.61	9.4
63	27.40	36.73	23.90	56	8.21			4.38		
87	26.84	37.32	24.54	37	8.19	2.465	0.17	3.61	0.84	10.2
97	26.52	37.41	24.70	34	8.18			3.49		
106	26.34	37.59	24.90	56	8.17			3.36		
116	25.53	38.29	25.68	38	8.15	2.485	0.20	3.00	1.00	18.6
125	23.99	39.56	27.12	46	8.11	2.510	0.24	2.14	1.32	10.2
135	22.97	40.13	27.87	34	8.07	2.515	0.26	1.55	1.45	15.2
158	22.67	40.27	28.06	30	8.07			1.27		
181	22.55	40.29	28.10	31	8.08			1.19	1.58	15.2
Station 248: April 27, 1948; LMT, 1720—1800; 14° 12′ N, 42° 18′ E; depth bottom, 355 m; wind, W 1; sea, 0										
24	~27.0	b)		53		2.470		4.68	0.74	7.6
36	~26.5	b)		53	8.13			4.55		
60	25.90	38.07	25.41	44	8.09	2.460	0.24	3.41	0.84	9.4
84	23.95	40.04	27.48	36	8.16			2.59		
108	21.88	40.34	28.32	30	8.08	2.500	0.27	1.58	1.10	13.5
132	22.20	40.46	28.33	22	8.08			1.47	1.20	13.5
156	21.97	40.50	28.43	21	8.05	2.500	0.27	0.94	1.58	13.5
180	21.89	40.51	28.45	22	7.98			0.55		
204	21.94	40.62	28.53	44	7.99			0.40		
228	21.80	40.60	28.55	29	7.97	2.495	0.38	0.35	1.87	18.6
251	21.74	40.56	28.54	33	7.97			0.31		
275	21.73	40.57	28.55	28	8.01			0.32		
299	21.73	40.55	28.55	38	8.01	2.485	0.31	0.32	1.71	23.0
323	21.74	40.57	28.55	29	8.02			0.42		
346	21.70	40.56	28.55	61	8.00	2.505	0.32	0.30	1.71	23.8
Station 251: April 29, 1948; LMT, 1135—1155; 17° 29′ N, 40° 22′ E; wind, 0; sea, 0										
0				59						
10				44						
20				53						
30				51						
40				70						
50				39						
60				40						
70				35						
80				118						
Station 254: May 3, 1948; LMT, 1335—1555; 21° 10′ N, 38° 09′ E; depth bottom, 1937 m; wind, N 5; sea, 2										
0	27.02	38.70	25.52	64	8.14	2.475	0.20	4.21	0.39	
24				60						
47	25.93	b)		57	8.21	2.475		4.48		
71	24.84			51						
95	24.31	39.89	27.27	41	8.19	2.485	0.18	4.18		
118	23.58	40.40	27.88	44	8.18					
142	22.56	40.44	28.21	60	8.15	2.530	0.21	3.20	0.42	
237	21.80	40.54	28.51	46	8.03	2.500	0.20	1.10	1.00	
473	21.69	40.58	28.60	32	8.02			0.86	0.96	
710	21.78	40.56	28.54	35	8.04			1.61	0.87	
945	21.73	40.61	28.58	17	8.08			2.31	0.68	
1415	21.80	40.64	28.58	27	8.09			2.61	0.58	
1888	22.57	42.43	29.52	22	7.99	2.470	0.25	2.28	0.58	
1913		43.32		37	7.82	2.395		1.59	0.32	

Depth D meters	Temperature t °C	Salinity S ‰	Density σ_t	Particle content s km^{-1}	Hydrogen ion pH	Alkalinity millival/L	Carbon dioxide CO_2 ml/L	Oxygen O_2 ml/L	Phosphate PO_4—P μg-atoms/L	Silicate SiO_2 μg-atoms l
1918	24.25	43.73	30.07	69	7.77	2.385	0.43	1.60	0.42	
1924		43.77		88	7.75	2.360		1.49	0.39	
1930	24.53	43.96	30.26	117	7.71	2.360	0.51	1.40	0.39	
Station 261: May 15, 1948; LMT, 0335—0403; 31° 25′ N, 32° 25′ E; depth bottom, 29 m; wind, 0—1; sea, 0										
0.5	20.33	38.96	27.70	317	8.07			5.18	0.10	
4.5	20.34	38.94	27.68	261	8.18			4.59	0.10	
9.5	20.35	38.93	27.69	261	8.19			5.21	0.19	
14.5	20.25	38.92	27.71	357	8.20			5.12	0.23	
19.5	19.90	38.93	27.80	508	8.21			4.76	0.23	
24.5	19.89	38.92	27.80	468	8.20			5.06	0.26	
Station 262: May 15, 1948; LMT, 0650—0711; 31° 41′ N, 32° 30′ E; depth bottom, 49 m; wind, 0—1; sea, 0										
0	19.46	38.97	27.95	69	8.14			4.96	0.23	
10	18.78	38.87	28.05	83	8.20			5.27	0.19	
19	18.72	38.91	28.09	76	8.20			5.34		
29	18.69	38.89	28.08	88	8.19					
38	18.64	38.93	28.12	88	8.19					
46	18.50	38.92	28.15	237	8.19			4.86	0.29	
Station 263: May 15, 1948; LMT, 0905—0950; 31° 51′ N, 32° 34′ E; depth bottom, 381 m; wind, 0—1; sea, 0										
0	18.57	39.02	28.22	51	8.15	2.595	0.11	4.98		
7				83						
31	18.08	38.96	28.30	41	8.22			5.25		
55	17.56	38.95	28.39	53	8.21			4.92		
79	17.16	38.96	28.52	54	8.19			5.31		
104	16.84	38.97	28.62	42	8.23	2.625		5.34		
152	16.44	39.13	28.84	21	8.20			5.18		
201	15.82	39.09	28.97	26	8.22	2.650	0.12	4.71		
249	15.10	38.96	29.02	88	8.16	2.650	0.09	4.54		
298	14.84	38.92	29.04	72	8.16	2.650	0.09	4.53		
346	14.66	38.85	29.04	61	8.15			4.40		
365	14.74	38.91	29.06	63	8.15			4.18		
375	14.44	38.86	29.08	41	8.17	2.660	0.11	4.35		
Station 266: May 16, 1948; LMT, 0325—0344; 31° 37′ N, 30° 33′ E; depth bottom, 23 m; wind, NW 2; sea, 1										
0	19.76			181						
5	19.76			173						
10	19.77			141						
15	19.71			173						
20	19.42			355						
Station 267: May 16, 1948; LMT, 0421—0445; 31° 41′ N, 30° 22′ E; depth bottom, 33 m; wind, NW 1; sea, 1										
0	19.94	38.85	27.74	93				4.96	0.19	
7		38.84		72				4.96		
17	19.43	38.86	27.74	108				5.07		
27		38.85		194				5.18		
32	19.02	38.87	27.98	194				4.90	0.23	
Station 268: May 16, 1948; LMT, 0515—0525; 31° 45′ N, 30° 21′ E; depth bottom, 52 m; wind, 0; sea, 0										
5				111						
15				45						
25				36						
35				137						
45				288						
50				288						

Depth D meters	Temperature t °C	Salinity S ‰	Density σ_t	Particle content s km^{-1}	Hydrogen ion pH	Alkalinity millival/L	Carbon dioxide CO_2 ml/L	Oxygen O_2 ml/L	Phosphate PO_4—P μg-atoms/L	Silicate SiO_2 μg-atoms/L
Station 269: May 16, 1948; LMT, 0558—0610; 31° 49′ N, 30° 20′ E; depth bottom, 57 m; wind, 0; sea, 0										
1				69						
11				35						
21				32						
31				30						
41				40						
51				116						
56				116						
Station 270: May 16, 1948; LMT, 0705—0715; 31° 53′ N, 30° 19′ E; depth bottom, 106 m; wind, N 1; sea, 1										
0				f)						
9				53						
19				39						
29				32						
49				35						
69				32						
89				51						
99				63						
104				68						
Station 271: May 16, 1948; LMT, 0803—0830; 31° 56′ N, 30° 17′ E; depth bottom, 214 m; wind, 0; sea, 0										
1	19.41	38.90	27.91	61	8.12			4.76		
13				37						
37	17.88	38.82	28.24	50	8.23			4.86		
61				30						
86	16.68	38.89	28.59	30	8.24			5.04		
110				23						
134	16.47	38.93	28.66	29	8.23			5.09		
159				29						
183	16.26	38.99	28.77	32	8.21			5.04		
207				46						
212	16.13	39.12	28.91	50	8.22			5.04		
Station 272: May 16, 1948; LMT, 1100—1115; 32° 12′ N, 30° 13′ E; depth bottom, 82 m; wind, N 1; sea, 1										
1				70						
10				46						
20				40						
30				33						
40				39						
50				51						
60				53						
70				56						
80				50						
Station 285: May 21, 1948; LMT, 1709—1823, 2349—0142; 35° 41′ N, 21° 50′ E; depth bottom, 4240 m; wind, NW 4; sea, 1										
1	18.97	38.81	27.96	51	8.08				0.19	
24	17.70	38.87	28.32	56	8.20					
48	16.46	38.92	28.67	40	8.24					
72	15.91	38.91	28.79	33	8.24					
96	15.51	38.93	28.89	43	8.25				0.23	
144	15.25	38.94	28.96	28	8.24					
191	15.34	38.95	28.95	29	8.23					
287	14.76	38.93	29.07	25	8.22					
383	14.70	38.91	29.07	31	8.21				0.29	
479	14.44	38.86	29.08	28	8.21				0.29	
574	14.31	38.85	29.11	26	8.20				0.32	
766	13.96	38.80	29.15	21	8.17				0.42	

Depth D meters	Temperature t °C	Salinity S ‰	Density σ_t	Particle content s km^{-1}	Hydrogen ion pH	Alkalinity millival/L	Carbon dioxide CO_2 ml/L	Oxygen O_2 ml/L	Phosphate PO_4—P μg-atoms/L	Silicate SiO_2 μg-atoms/
957	13.71	38.76	29.17	24	8.16				0.45	
1430	13.65	38.69	29.13	43	8.05				0.52	
1906	13.62	38.69	29.14	26	8.14				0.58	
2859	13.71	38.66	29.10	27	8.12				0.48	
3812	13.89	38.62	29.03	26	8.11				0.45	
Station 301: June 7, 1948; LMT, 0950—1047; 38° 31′ N, 3° 50′ E; depth bottom, 2570 m; wind, 0; sea, 0										
1	20.42	36.86	26.08	167	8.10			4.70	0.61	4.4
10	19.54			119						
49	16.10	37.21	27.45	81	8.25			4.83	0.55	2.6
99	13.83	37.84	28.43	47	8.27			4.69	0.74	2.9
148	13.40	38.23	28.83	38	8.19			3.57	0.87	2.6
198	13.32	38.35	28.95	49	8.18			3.32	0.90	4.0
296	13.33	38.35	28.94	51	8.19			2.98	0.96	6.8
395	13.18	38.49	29.07	57	8.19			2.31	1.56	9.0
593	12.98	38.44	29.07	61	8.18			2.64	1.55	9.7
790	12.92	38.44	29.08	43	8.18			2.60	1.55	9.2
988	12.94	38.41	29.06	33	8.17			2.73	1.61	8.5
Station 306: June 11, 1948; LMT, 2214—2315; 36° 02′ N, 4° 59′ W; depth bottom, 882 m; wind, W 4—6; sea, 2										
1	17.56	36.34	26.43	103	7.92	2.505	0.48	4.91	0.23	4.4
24	17.10	36.30	26.50	75	8.20	2.440	0.19	4.82	0.26	2.6
47	c)	36.44		87	8.25	2.475		4.83	0.35	2.6
71	15.22	36.53	27.11	82	8.23	2.485	0.20	3.79	0.77	7.1
94	14.78	36.78	27.41	99	8.22	2.520	0.21	3.60	1.13	5.1
141	13.70	37.80	27.66	111	8.24	2.575	0.22	2.27	1.19	5.4
188	13.04	38.27	28.93	121	8.21	> 2.60	0.22	2.20	1.19	7.8
282	12.94	38.39	28.98	98	8.23	> 2.60	0.20	2.03	1.23	9.8
376	12.92	38.40	29.06	74	8.22	> 2.60	0.21	1.60	1.32	13.9
470	12.92	38.39	29.06	75	8.22	> 2.60	0.21	1.65	1.29	14.9
658	12.89	38.41	29.06	65	8.22	> 2.60	0.21	1.79	1.39	16.1
837	12.86	38.43	29.09	60	8.21	> 2.60	0.21	2.31	1.42	13.4
Station 307: June 12, 1948; LMT, 1545—1635; 35° 52′ N, 5° 54′ W; depth bottom, 497 m; wind, W 2; sea, 1										
1	19.99	36.15	25.66	128	8.17	2.395	0.21	5.02	0.16	8.3
24	19.18	36.36	26.03	56	8.21	2.385	0.19	4.98	0.23	0.1
48	16.65	36.30	26.65	47	8.24	2.425	0.18	4.90	0.19	0.3
73	15.42	36.61	27.13	55	8.21	2.430	0.20	4.01	0.45	5.5
97	14.55	37.07	27.47	50	8.20	2.410	0.21	2.97	0.68	7.2
145	14.46	37.75	28.23	54	8.21	2.460	0.20	2.70	0.68	5.3
194	13.27	38.02	28.68	62	8.22	2.550	0.21	1.92	0.77	8.9
242	13.01	38.24	28.90	56	8.23	2.570	0.21	1.91	0.68	9.5
291	13.00	38.27	28.95	45	8.23	> 2.59	0.21	1.74	0.74	9.0
339	13.02	38.29	28.96	39	8.23	> 2.60	0.21	1.56	0.81	7.8
388	13.03	38.43	29.05	43	8.23	> 2.60	0.21	1.48	0.71	8.2
436	13.02	38.27	28.95	39	8.22	> 2.60	0.22	1.50	0.68	8.2
Station 308: June 12, 1948; LMT, 2321—2417; 35° 45′ N, 6° 50′ W; depth bottom, 770 m; wind, NW 4; sea, 1										
1	19.94	36.28	25.77	84	8.14	2.415	0.26	5.08	0.13	2.9
14	19.31	36.46	26.07	75	8.18	2.355	0.21	5.03	0.26	3.1
39 a)	19.55									
63	17.32	36.39	26.51	57	8.21	2.415	0.19	3.71	0.26	4.5
86	16.41	36.34	26.70	63	8.22	2.415	0.19	2.85	0.29	3.5
135	15.61	36.20	26.77	46	8.20	2.400	0.20	1.88	0.65	4.2
182	14.29	36.00	26.92	77	8.16	2.390	0.28	1.87	1.00	4.7
279	12.95	35.78	27.03	53	8.14	2.405	0.28	1.80	1.26	7.2
374	12.08	35.69	27.12	35	8.16	2.385	0.25	1.91	1.45	7.4

Depth D meters	Temperature t °C	Salinity S ‰	Density σ_t	Particle content s km^{-1}	Hydrogen ion pH	Alkalinity millival/L	Carbon dioxide CO_2 ml/L	Oxygen O_2 ml/L	Phosphate PO_4—P μg-atoms/L	Silicate SiO_2 μg-atoms/L
470	11.46	35.59	27.23	42	8.19	2.385	0.17	1.42	1.51	8.1
566	10.92	35.60	27.28	43	8.14	2.400	0.28	1.59	1.67	12.7
662	10.47	35.62	27.38	60	8.12	2.420	0.30	1.71	1.74	15.3
758	10.14	35.62	27.43	85	8.10	2.390	0.31	1.88	1.81	17.3
Station 309: June 13, 1948; LMT, 0922—1102; 34° 56′ N, 7° 44′ W; depth bottom, 1510 m; wind, NW 5; sea, 2										
1	20.05	36.61	25.99	69	7.98	2.425	0.39	5.19	0.26	7.7
24	18.18	36.49	26.38	55	8.12	2.430	0.26	5.15	0.23	7.7
47	17.82	36.46	26.44	68	8.12	2.430	0.26	4.88	0.19	9.2
71	16.53	36.47	26.76	50	8.13	2.435	0.27	4.02	0.19	8.7
95	16.70	36.38	26.67	60	8.13	2.430	0.27	2.49	0.26	8.9
142	15.03	36.11	26.83	40	8.12	2.415	0.28	2.28	0.48	11.6
189	14.24	35.95	26.89	39	8.09	2.415	0.31	2.30	1.00	10.0
284	13.13	35.82	27.02	30	8.07	2.400	0.33	1.95	1.19	11.2
388	12.22	35.72	27.13	31	8.07	2.415	0.34	1.31	1.77	12.7
473	11.70	35.65	27.17	25	8.03	2.395	0.38	1.34	1.71	12.8
578	11.01	35.61	27.27	34	7.97	2.385	0.45	1.39	1.45	16.5
767	9.96	35.57	27.43	28	7.95	2.390	0.49	2.02	1.64	22.1
861	9.68	35.60	27.50	38	7.96	2.400	0.49	2.09	1.71	22.4
956	9.66	35.75	27.61	33	7.95	2.435	0.48	2.18	1.39	23.6
1050	9.74	35.87	27.69	38	7.96	2.430	0.48	2.30	1.42	22.2
1144	9.58	35.90	27.74	106	7.97	2.445	0.47	2.28	1.39	21.2
1333	9.24	35.90	27.80	88	8.00	2.475	0.41	2.52	1.39	20.3
Station 314: June 17, 1948; LMT, 0720—0940; 29° 48′ N, 17° 27′ W; depth bottom 4258 m; wind, ENE 6; sea, 3										
3785	2.44	34.93	27.90	23	7.99	2.435	0.34	5.92	2.16	59.5
4068	2.36	34.90	27.88	36	8.08	2.435	0.25	5.55	2.26	46.4
4234	2.41	34.89	27.87	41	8.10	2.445	0.23	5.41	2.22	46.4
4239		34.89		21	8.12	2.445	0.22	5.37	2.22	47.1
4245 a)	2.42									
4251	2.42	34.89	27.87	55	8.11	2.450	0.22	5.40	2.13	47.1
Station 319: June 21, 1948; LMT, 1117—1345; 22° 31′ N, 23° 28′ W; depth bottom, 4908 m; wind, ENE 7; sea, 2										
4430	2.38	34.90	27.88	25	8.11	2.485	0.23	5.06	2.13	47.1
4764	2.40	34.89	27.87	25	8.11	2.495	0.23	5.45	2.06	46.7
4859		34.90		44	8.08	2.485		5.30	1.94	45.6
4883	2.44	34.87	27.85	27	8.06	2.480	0.26	5.29	2.00	46.3
4895 a)	2.44									
4901	2.45	35.03	27.97	66	8.05	2.480	0.27	5.26	1.77	33.7
Station 321: June 24, 1948; 18° 50′ N, 18° 24′ W; depth bottom, 290 m; wind, NE 15; sea, 5										
1				165						
10				166						
19				151						
29				125						
38				73						
48				98						
57				93						
67				61						
76				34						
95				33						
143				30						
190				36						
285				105						

Depth D meters	Temperature t °C	Salinity S ‰	Density σ_t	Particle content s km^{-1}	Hydrogen ion pH	Alkalinity millival/L	Carbon dioxide CO_2 ml/L	Oxygen O_2 ml/L	Phosphate PO_4—P μg-atoms/L	Silicate SiO_2 μg-atoms/
Station 322: June 24, 1948; LMT, 1525—1605; 18° 44′ N, 18° 44′ W; depth bottom, 2970 m; wind NE 14; sea, 5										
1	21.98	35.88	24.92	250	7.98	2.415	0.36	5.31	0.68	5.9
19	21.73	35.86	24.96	261	8.21	2.425	0.18	4.64	0.84	4.7
28				236						
38	18.58	35.81	25.76	96	8.07	2.420	0.26	3.07	2.22	8.7
47				120						
57	15.78	35.75	26.39	61	7.93	2.445	0.48	1.44	2.90	10.6
66				93						
75	14.70	35.65	26.55	76	7.93	2.430	0.49	1.39	3.70	11.7
94	14.16	35.62	26.66	47	7.94	2.425	0.49	1.28	2.68	11.8
141	13.38	35.52	26.74	80	7.93	2.425	0.51	1.40	2.56	14.4
189	12.89	35.49	26.81	59	7.95	2.425	0.50	1.51	3.00	15.7
283	11.61	35.35	26.96	57	7.90	2.425	0.55	1.50	2.78	20.3
377	10.30	35.22	27.09	93	7.90	2.425	0.58	1.16	3.04	20.3
Station 323: June 25, 1948; LMT, 0944—1118; 17° 57′ N, 21° 03′ W; depth bottom, 3065 m; wind, NNE 7; sea, 4										
1553	4.42	35.02	27.78	28	8.06	2.455	0.38	4.62	2.48	30.3
2024	3.61	34.98	27.83	51	8.06	2.440	0.37	5.61	3.00	34.6
2496	3.01	34.97	27.88	36	8.06	2.440	0.36	5.45	2.87	38.1
2922		34.93		38	8.07	2.400		5.32	2.84	45.3
3014	2.61	34.91	27.87	30	8.07	2.455	0.33	5.27	3.04	45.3
3039	2.60	34.90	27.87	64	8.08	2.475	0.33	5.06	3.38	64.5
3044		34.91		43	8.04	2.460		5.12	3.57	64.5
3050	2.60	34.93	27.89	30	8.05	2.455	0.34	5.11	3.57	61.7
3056	2.61	34.93	27.89	46	8.06	2.475	0.35	5.09	3.57	60.2
Station 325: June 30, 1948; LMT, 1507—1600; 15° 53′ N, 25° 27′ W; depth bottom, 4280 m; wind, NE 2; sea, 2										
1	25.04	36.18	24.24	55	8.16	2.525	0.21	4.95	0.00	0.5
10	24.74			96						
20	24.60	36.15	24.34	88	8.22	2.525	0.18	4.93	0.06	1.3
39	24.56	36.18	24.38	94	8.27	2.525	0.15	4.89	0.16	2.0
59	23.77	36.13	24.59	49	8.26	2.525	0.16	5.01	0.26	3.4
78	21.54	36.22	25.29	67	8.23	2.490	0.19	4.76	0.42	5.1
98	18.86	36.40	26.14	52	8.15	2.465	0.24	3.45	0.71	5.7
147	15.76	36.04	26.62	59	8.05	2.510	0.34	2.52	1.26	8.4
195	13.78	35.67	26.76	53	8.02	2.505	0.39	2.18	1.48	10.1
293	12.01	35.44	26.95	32	8.01	2.505	0.42	1.66	1.87	13.7
391	10.58	35.29	27.10	27	7.99	2.510	0.46	1.87	2.36	17.5
488	9.07	35.12	27.22	24	7.94	2.505	0.54	2.07	2.36	19.2
586	8.02	34.99	27.28	15	7.91	2.500	0.58	2.18	2.39	22.8
Station 326: July 1, 1948; LMT, 1650—1738; 13° 37′ N, 25° 55′ W; depth bottom, 4810 m; wind, N 4; sea, 2										
1	25.49	36.16	24.12	60	8.01	2.430	0.31	4.94	0.00	0.0
10	24.79			46						
24	24.47	36.19	24.43	44	8.19	2.460	0.19	5.44	0.00	1.0
47	23.78	36.18	24.63	75	8.12	2.465	0.24	4.95	0.00	2.9
71	22.57	36.25	25.02	41	8.28	2.460	0.16	5.00	0.00	5.4
95	18.10	36.10	26.10	33	8.14	2.485	0.26	2.84	1.32	5.9
142	13.85	35.58	26.70	29	8.00	2.480	0.41	2.01	1.87	12.4
190	12.38	35.33	26.78	30	7.98	2.480	0.47	1.96	2.10	16.6
284	10.82	35.13	26.93	29	7.95	2.495	0.50	1.79	2.61	18.0
379	10.62	35.24	27.05	29	7.91	2.505	0.56	1.46	2.45	20.3
473	9.52	35.11	27.14	31	7.92	2.505	0.56	1.49	2.68	21.8
568	8.53	35.01	27.22	16	7.91	2.505	0.58	1.71	2.81	23.6

Depth D meters	Temperature t °C	Salinity S ‰	Density σ_t	Particle content s km^{-1}	Hydrogen ion pH	Alkalinity millival/L	Carbon dioxide CO_2 ml/L	Oxygen O_2 ml/L	Phosphate PO_4—P μg-atoms/L	Silicate SiO_2 μg-atoms/L
Station 327: July 2, 1948; LMT, 1312—1357; 11° 12′ N, 26° 24′ W; depth bottom, 5650 m; wind, 2; sea, 1										
1	26.81	35.84	23.43	67	8.01	2.400	0.30	4.66	0.10	3.2
9	26.39			49						
23	25.58	35.96	24.51	47	8.11	2.425	0.23	4.77	0.23	4.2
47	16.54	35.57	26.08	40	7.95	2.385	0.44	2.24	2.19	8.3
70	14.48	35.53	26.50	33	7.90	2.380	0.54	2.12	2.48	11.8
94	13.00	35.29	26.83	30	7.91	2.395	0.54	2.85	2.45	14.6
140	12.00	35.17	26.66	26	7.91	2.390	0.53	2.70	2.61	15.8
187	11.44	35.10	26.79	28	7.92	2.385	0.53	2.54	2.84	16.5
281	10.63	35.10	26.94	26	7.83	2.390	0.68	1.65	2.96	17.8
375	9.83	35.05	27.03	35	7.79	2.400	0.78	1.23	3.33	20.6
468	8.95	35.01	27.15	33	7.78	2.390	0.82	1.20	3.38	22.1
562	8.00	34.92	27.23	28	7.76	2.385	0.86	1.57	3.36	26.0
Station 328: July 2, 1948; LMT, 2303—2540; 10° 12′ N, 26° 36′ W; depth bottom, 5358 m; wind, E 2; sea, 1										
4880	2.42	34.88	27.86	25	7.62	2.450	0.86	5.46	2.74	55.0
5212	2.31	34.88	27.87	25	7.81	2.455	0.50	5.38	3.12	60.9
5307		34.88		42	7.81	2.455		5.70	3.12	60.4
5331	2.34	34.88	27.87	24	7.81	2.455	0.49	5.56	3.12	60.4
5340		34.86		18	7.77	2.450		5.54	3.12	59.2
5346	2.34	34.87	27.85	30	7.76	2.445	0.56	5.54	3.12	58.8
5352	2.35	34.87	27.86	31	7.76	2.445	0.56	5.56	3.20	56.2
Station 330: July 5, 1948; LMT, 1022—1113; 07° 53′ N, 24° 43′ W; depth bottom, 4940 m; wind, S 9; sea, 4										
1	26.81	35.91	23.48	64	8.20	2.350	0.16	4.82	0.58	3.4
9	25.92			52						
24	26.72	35.71	23.36	45	8.27	2.430	0.14	4.81	0.77	1.4
47	22.89	35.93	24.69	35	8.23	2.420	0.18	4.85	1.00	1.5
71	17.16	35.72	26.04	38	8.09	2.430	0.30	2.90	2.19	7.7
94	14.93	35.52	26.40	28	8.07	2.425	0.33	2.90	2.42	9.6
142	13.52	35.27	26.51	28	8.08	2.420	0.35	2.74	2.84	12.6
189	12.80	35.22	26.62	22	8.06	2.415	0.35	2.42	3.00	14.5
283	10.97	35.08	26.87	30	8.00	2.415	0.44	2.08	3.19	18.5
377	9.56	34.96	27.01	25	7.91	2.415	0.57	1.36	3.22	21.4
472	8.28	34.84	27.13	24	7.86	2.405	0.67	1.52	3.70	25.9
566	6.91	34.69	27.21	37	7.85	2.395	0.70	1.97	4.06	29.2
Station 332: July 7, 1948; LMT, 0852—0942, 1104—1345; 5° 45′ N, 21° 43′ W; depth bottom, 3545 m; wind, S 6; sea, 2										
1	27.22	35.50	23.04	92	8.17	2.350	0.18	4.44	0.48	0.9
9	26.32			56						
23	27.25	35.40	22.95	39	8.24	2.375	0.14	4.52	0.55	1.6
47	27.28	35.42	22.95	36	8.26	2.370	0.14	4.54	0.65	2.8
70	22.81	35.94	24.72	36	8.16	2.390	0.20	3.80	1.00	3.2
93	17.09	35.70	26.05	32	8.07	2.390	0.32	2.74	1.77	6.8
140	14.19	35.23	26.34	28	8.03	2.390	0.37	2.21	2.58	10.7
188	13.34	35.30	26.57	30	8.01	2.385	0.40	2.06	2.68	11.3
284	12.00	35.19	26.75	18	8.00	2.370	0.41	2.07	2.55	10.9
380	9.46	34.89	26.98	28	7.93	2.365	0.52	2.15	3.12	20.2
476	7.57	34.69	27.11	21	7.94	2.375	0.55	2.44	3.29	21.6
572	6.43	34.17	26.87	20	7.92	2.355	0.56	2.68	3.42	22.8
3065 a)	2.70									
3400	2.52	34.95	27.91	23	7.89	2.435	0.52	5.46	2.22	34.8
3496		34.91		57	8.08	2.425		5.29	2.19	33.1
3520 a)	2.47									
3529		34.92		20	8.10	2.415		5.38	2.26	34.7
3535	2.45	34.90	27.88	41	8.10	2.410	0.30	5.43	2.22	33.9
3541	2.44	34.90	27.88	39	8.17	2.420	0.27	5.39	2.22	34.8

Depth D meters	Temperature t °C	Salinity S ‰	Density σ_t	Particle content s km^{-1}	Hydrogen ion pH	Alkalinity millival/L	Carbon dioxide CO_2 ml/L	Oxygen O_2 ml/L	Phosphate PO_4—P μg-atoms/L	Silicate SiO_2 μg-atoms/L
Station 333: July 8, 1948; LMT, 2300—2347; 3° 48′ N, 20° 32′ W; depth bottom, 4330 m; wind, S 4; sea, 2										
1	26.01	35.13	23.15	94	7.92	2.330	0.39	4.67	1.48	6.3
10	25.99			53						
24	25.57	35.14	23.29	63	8 23	2.330	0.15	4.66	1.19	4.2
49	25.17	35.27	23.50	54	8.25	2.350	0.14	4.69	1.35	5.2
73	24.55	35.32	23.73	55	8.25	2.345	0.15	4.53	1.45	3.9
97	22.07	35.64	24.71	48	8.19	2.375	0.19	4.03	1.71	5.9
146	15.64	35.57	26.29	27	8.07	2.370	0.30	2.80	2.61	12.0
194	14.45	35.45	26.46	25	8.07	2.370	0.32	2.51	3.12	13.9
289	12.64	35.22	26.65	25	7.98	2.350	0.43	1.99	3.38	15.4
384	9.22	34.85	27.00	32	8.00	2.350	0.44	2.34	3.64	22.4
479	7.11	34.62	27.13	27	8.01	2.340	0.46	2.96	3.86	24.6
574	6.27	34.59	27.21	21	7.99	2.340	0.49	3.10	4.15	28.8
764	4.84	34.55	27.36	38	7.96	2.325	0.51	3.26	3.89	35.6
Station 335: July 10, 1948; LMT, 1038—1125; 2° 06′ N, 20° 07′ W; depth bottom, 5060 m; wind, SSE 5; sea, 2										
1	25.78	35.20	23.27	64	8.17	2.390	0.19	4.89	0.96	8.1
9	25.73			66						
23	25.73	35.18	23.27	42	8.18	2.400	0.19	4.83	0.81	6.1
47	25.32	35.28	23.47	73	8.18	2.385	0.19	4.94	1.03	7.5
70	19.64	35.73	25.42	43	8.04	2.395	0.33	3.08	1.87	9.8
93	16.49	35.69	26.07	31	7.99	2.380	0.39	2.56	2.22	12.4
140	15.15	35.54	26.15	31	7.99	2.350	0.41	2.81	2.71	14.7
188	13.92	35.40	26.53	25	7.97	2.340	0.43	2.72	2.84	20.5
284	10.89	35.05	26.86	22	7.84	2.320	0.64	2.48	3.06	22.1
380	8.98	34.82	27.00	29	7.82	2.285	0.70	2.84	3.33	24.6
475	7.29	34.67	27.14	20	7.75	2.285	0.86	3.59	3.48	28.7
571	5.85	34.53	27.22	44	7.74	2.275	0.86	3.00	3.60	32.8
763	4.74	34.54	27.37	22	7.72	2.340	0.98	3.43	3.89	37.4
Station 336: July 11, 1948; LMT, 1558—1649; 0° 43′ N, 18° 52′ W; depth bottom, 5030 m; wind, SSE 3; sea, 2										
1	24.93	35.42	23.69	71	7.68	2.400	0.81	4.90	0.39	6.1
10	24.94	35.41	23.69	54	8.23	2.400	0.17	4.94	0.52	11.0
24	24.87	35.37	23.68	52	8.27	2.395	0.15	4.95	0.48	12.9
47	c)	35.54		47	8.28	2.410		4.95	0.68	13.9
71	16.63	35.66	26.12	32	8.07	2.400	0.31	2.94	1.43	15.2
95	13.93	35.52	26.62	29	8.07	2.400	0.33	2.52	2.61	16.3
142	13.79	35.37	26.56	28	8.08	2.395	0.32	2.86	2.71	16.5
190	13.57	35.28	26.51	26	8.09	2.400	0.30	2.02	2.74	17.4
285	10.89	35.02	26.83	25	7.93	2.390	0.51	1.78	3.83	18.7
380	8.58	34.77	27.02	28	7.91	2.380	0.58	2.55	4.02	22.4
476	7.10	34.63	27.14	20	7.93	2.375	0.56	2.91	4.21	25.4
571	6.10	34.57	27.22	22	7.83	2.380	0.73	3.29	4.38	31.2
762	4.92	34.48	27.30	23	7.91	2.340	0.60	3.36	4.35	37.4
Station 337: July 12, 1948; LMT, 0951—1341; 0° 03′ S, 18° 13′ W; depth bottom, 6030 m; wind, SE 5; sea, 2										
1	23.27	35.95	24.59	59	8.07	2.435	0.28	4.64	0.87	6.8
10	23.03			49						
24	22.58	35.89	24.74	40	8.15	2.420	0.23	4.60	0.84	8.0
48	20.62	35.79	25.21	53	8.16	2.410	0.22	4.19	1.06	7.4
72	16.56	35.74	26.20	38	8.18	2.400	0.22	3.86	1.45	7.8
96	15.64	35.66	26.35	26	8.11	2.400	0.29	3.81	2.00	8.8
144	12.95	35.25	26.62	26	8.07	2.400	0.35	2.98	2.29	10.9
192	12.65	35.22	26.65	29	8.07	2.395	0.35	3.49	2.58	12.7
289	11.35	35.08	26.79	23	8.01	2.380	0.41			
386	8.62	34.77	27.02	31	7.98	2.355	0.49	2.32	3.04	16.7
483	7.11	34.60	27.11	27	7.97	2.350	0.50	3.07	3.67	26.8

Depth D meters	Temperature t °C	Salinity S ‰	Density σ_t	Particle content s km^{-1}	Hydrogen ion pH	Alkalinity millival/L	Carbon dioxide CO_2 ml/L	Oxygen O_2 ml/L	Phosphate PO_4—P μg-atoms/L	Silicate SiO_2 μg-atoms/L
580	6.18	34.51	27.17	18	7.97	2.355	0.50	3.20	3.86	35.0
774	5.10	34.51	27.30	20	7.98	2.355	0.50	3.44	3.99	47.0
978	4.37	34.56	27.42	29	7.97	2.380	0.50	3.73	3.99	37.4
1425	4.14	34.95	27.76	20	7.84	2.385	0.68	5.20	2.39	13.5
1906	3.57	34.96	27.81	20	7.82	2.390	0.69	5.71	2.48	10.3
2386		34.93		31	7.82	2.390		5.65	2.74	12.0
2867	2.71	34.91	27.86	26	7.86	2.395	0.57	5.56	2.74	14.4
3348		b)		33	7.82	2.400		5.76	3.00	13.9
3829	2.32	34.90	27.89	36	7.81	2.400	0.57	5.90	3.38	24.2
4319		34.78		17	7.74	2.440		5.39	3.74	37.1
4790	1.08	34.74	27.85	15	7.72	2.435	0.66	5.22	3.86	38.2
5271	1.13	f)		18	7.66	2.430		5.35	3.99	41.7
Station 340: July 14, 1948; LMT, 0538—0934; 0° 13′ N, 18° 26′ W; depth bottom, 7594 m; wind, SSE 7; sea, 3										
6729		34.73		25	7.65	2.370		5.04	3.04	129.0
7209 a)	1.38									
7449		34.74		20	7.77	2.380		5.21	3.36	124.0
7545	1.46	34.75	27.83	31	7.67	2.455	0.57	5.14	3.54	127.8
7569		34.76		39	7.69	2.460		5.13	3.60	124.0
7578	1.46	34.74	27.83	22	7.72	2.455	0.50	5.11	3.60	116.9
7584		34.75		19	7.71	2.455		5.15	3.54	116.9
7590 a)	1.46									
Station 342: July 16, 1948; LMT, 1900—2126; 0° 59′ N, 18° 37′ W; depth bottom, 5261 m; wind, SSE 7; sea, 3										
4760	2.24	34.89	27.88	38	7.91	2.415	0.39	5.60	2.52	
5108	2.24	34.86	27.86	24	7.95	2.430	0.35	5.34	2.84	
5207		34.88		27	8.00	2.425		5.55	2.87	
5232	2.25	34.86	27.85	32	8.01	2.415	0.28	5.58	2.68	
5242		34.86		28	8.02	2.415		5.58	2.64	
5248	2.26	34.85	27.85	25	8.02	2.410	0.27	5.60	2.68	
5254	2.28	34.85	27.85	24	8.03	2.410	0.26	5.47	2.64	
Station 343: July 17, 1948; LMT, 1330—1538; 1° 10′ N, 19° 50′ W; depth bottom, 4301 m; wind, SE 7; sea, 3										
1479 e)	4.04	34.97	27.78	25	8.14	2.395	0.30	5.27	5.05	34.4
1949 e)	3.54	34.97	27.83	28	8.39	2.400	0.12	5.69	4.35	32.2
2429 e)				26						
2889	2.69	34.93	27.88	25	8.26	2.405	0.21	5.68	4.93	34.9
3360				17						
3830	2.39	34.89	27.87	20	8.27	2.405	0.19	6.02	4.31	41.0
4159		34.87		18	8.22	2.415		5.91	4.18	47.7
4253	2.32	34.87	27.86	22	8.25	2.415	0.18	5.61	4.15	51.0
4281		34.89		25	8.27	2.415		5.70	3.51	51.4
4290		34.88		18		2.430		5.71	3.36	49.1
4297	2.29	34.88	27.87	25	8.28	2.430	0.18	5.70	3.42	44.5
Station 344: July 18, 1948; LMT, 1330—1534; 0° 44′ N, 22° 48′ W; depth bottom, 3813 m; wind, ESE 7; sea, 3										
1460 e)	4.22	34.92	27.72	28	7.77	2.395	0.82	4.96	3.45	22.6
1930 e)	c)	34.96		25	8.09	2.395		5.81	2.90	20.8
2399 e)				27						
2868	2.83	34.90	27.85	46	8.08	2.400	0.31	5.61	2.87	27.9
3339		34.93		18	8.06	2.400		5.58	2.90	35.7
3668	2.44	34.92	27.89	23	8.05	2.400	0.31	5.70	4.18	39.9
3752		34.93		22	8.09			5.69	5.05	50.9
3785 a)	2.40									
3794		34.90		19	8.06	2.400		5.69	5.18	37.7
3800	2.40	34.92	27.89	18	8.05	2.410	0.31	5.73	3.42	38.5
3806	2.39	34.90	27.88	24	8.05	2.400	0.31	5.70	3.06	38.2

Depth D meters	Temperature t °C	Salinity S ‰	Density σ_t	Particle content s km^{-1}	Hydrogen ion pH	Alkalinity millival/L	Carbon dioxide CO_2 ml/L	Oxygen O_2 ml/L	Phospate PO_4—P μg-atoms/L	Silicate SiO_2 μg-atoms/L
Station 345: July 19, 1948; LMT, 1250—1451; 0° 30′ N, 25° 38′ W; depth bottom, 3265 m; wind, SSE 7; sea, 3										
1348	4.27	34.94	27.73	35	7.92	2.385	0.55	4.91	2.84	26.9
1827	3.43	34.94	27.82	28	8.07	2.370	0.36	5.93	2.58	21.8
2306				44						
2785	2.71	34.93	27.88	28	8.08	2.395	0.31	5.72	2.90	36.0
3120	2.59	34.94	27.89	22	8.05	2.400	0.32	6.08	3.04	43.1
3216		34.93		29	8.07	2.400		5.77	3.12	41.3
3240	2.54	34.94	27.90	26	8.10	2.405	0.28	5.89	2.96	39.9
3249				38						
3255	2.54	34.93	27.89	20	8.08	2.400	0.29	6.05	3.06	40.9
3261	2.55	34.92	27.87	28	8.08	2.400	0.29	6.17	2.94	40.9
Station 347: July 20, 1948; LMT, 1617—1843; 0° 27′ N, 27° 45′ W; depth bottom, 3696 m; wind, ESE 7; sea, 3										
1326	4.35	34.91	27.69	23	7.89	2.405	0.61	4.69	2.90	25.5
1788	3.56			19	8.06	2.395		5.86	2.61	21.2
2264				21						
2741	2.83	34.94	27.82	20	8.06	2.395	0.34	5.69	2.81	36.0
3217 a)	2.72									
3551	2.47	34.92	27.88	19	8.07	2.400	0.30	5.86	2.94	43.1
3646		34.91		15	8.07	2.405		5.75	2.90	42.0
3670	2.50	34.92	27.88	19	8.06	2.405	0.29	5.79	2.90	40.3
3679				20						
3685	2.48	34.92	27.88	16	8.05	2.405	0.29	5.70	2.94	41.0
3691	2.48	34.92	27.88	24	8.05	2.405	0.28	5.64	2.84	38.2
Station 349: July 21, 1948; LMT, 1550—1725; 0° 57′ N, 29° 49′ W; depth bottom, 2820 m; wind, ESE 9; sea, 3										
1411	4.38	34.93	27.71	29	7.79	2.390	0.77	4.77	2.71	22.1
1890	3.55	35.00	27.85	24	8.06	2.370	0.36	5.92	2.36	21.2
2354	3.05	34.97	27.87	27	8.09	2.375	0.32	5.89	2.52	26.9
2680	2.85	34.95	27.88	20	8.05	2.390	0.35	5.80	2.45	32.9
2772		34.95		25	8.06	2.400		5.85	2.52	37.0
2795	2.80	34.93	27.87	25	8.09	2.400	0.31	5.71	2.52	37.7
2804		34.94		16	8.08	2.405		5.71	2.48	37.7
2810	3.06	34.95	27.86	18	8.05	2.400	0.34	5.70	2.48	37.3
2816		34.95			8.05	2.400		5.69	2.48	37.0
Station 351: July 22, 1948; LMT, 1607—1817; 0° 39′ N, 32° 10′ W; depth bottom 3858 m; wind, ESE 6; sea, 3										
1451	4.19	34.98	27.77	30	7.91	2.370	0.55	5.84	2.71	20.4
1924	3.47	34.98	27.84	22	8.09	2.390	0.33	5.87	2.22	18.5
2407	3.10			25						
2891		34.99		21	8.07	2.405		5.74	2.42	29.8
3374 a)	2.52									
3712	2.41	34.93	27.90	23	8.06	2.405	0.28	6.01	2.42	32.1
3809		34.92		22	8.05	2.405		5.99	2.36	30.1
3833	2.35	34.91	27.89	20	8.06	2.405	0.28	5.83	2.26	33.2
3842				163						
3848	2.33	34.90	27.89	20	8.05	2.400	0.28	5.93	2.22	32.1
3854	2.32	34.89	27.88	42	8.05	2.405	0.28	5.98	2.36	32.4
Station 353: July 23, 1948; LMT, 1105—1332; 0° 16′ N, 33° 40 W; depth bottom, 4547 m; wind, SE 7; sea, 3										
1656	3.87	34.98	27.80	24	7.80	2.400	0.75	5.66	2.58	18.3
2137	3.30	34.95	27.84	26	8.03	2.395	0.39	5.85	2.48	22.8
2619		34.94		29	8.04	2.395		5.85	2.45	28.0
3100	2.65	34.93	27.89	57	8.07	2.405	0.31	5.85	2.45	33.5
3582				24						
4063	1.86	34.92	27.94	36	8.08	2.405	0.26	5.94	2.55	36.0
4400		34.77		35	8.00	2.415		5.16	3.57	82.5

Depth D meters	Temperature t °C	Salinity S ‰	Density σ_t	Particle content s km^{-1}	Hydrogen ion pH	Alkalinity millival/L	Carbon dioxide CO_2 ml/L	Oxygen O_2 ml/L	Phosphate PO_4—P μg-atoms/L	Silicate SiO_2 μg-atoms/L
4496 a)	0.92									
4525		34.75		26	7.98	2.410		5.30	3.80	88.5
4535	0.91	34.75	27.87	53	7.98	2.415	0.35	5.23	3.60	114.0
4542 a)	0.92									
Station 354: July 24, 1948; LMT, 1604—1721; 0° 06′ N, 34° 41′ W; depth bottom, 4550 m; wind, ESE 9; sea, 4										
1	26.09	35.89	23.71	99	8.05	2.410	0.28	4.56	0.65	3.9
24	25.98	35.88	23.74	81	8.19	2.435	0.18	4.55	0.58	3.7
48	25.86	35.91	23.80	91	8.21	2.420	0.17	4.33	0.52	4.4
72	25.09	36.15	24.19	41	8.21	2.415	0.17	4.32	0.65	3.6
96	23.42	36.58	25.09	33	8.18	2.445	0.19	4.00	1.03	5.8
144	16.37	35.74	26.25	32	8.15	2.430	0.25	4.00	1.84	9.5
231 e)	12.88	35.25	26.63	28	8.07	2.350	0.33	3.55	2.10	12.8
326 e)	9.70	34.87	26.93	21	8.02	2.320	0.41	3.10	2.45	17.8
420	7.47	34.64	27.09	26	8.00	2.360	0.45	2.82	2.71	24.1
609	5.61	34.54	27.26	19	7.92	2.390	0.59	3.29	3.26	28.2
798 a)	4.64									
1270	4.41	34.94	27.72	37	8.00		0.43	4.72		
Station 357: July 27, 1948; LMT, 0810—1015; 2° 25′ N, 39° 17′ W; depth bottom, 4436 m; wind, E 6; sea, 3										
3940	2.24	34.93	27.91	24	7.89	2.440	0.46	5.76	2.10	60.5
4138	1.77	34.85	27.89	23	7.98	2.445	0.35	5.53	2.26	64.9
4287	1.42	f)		22	7.99	2.465		5.31	2.36	90.5
4385		34.78		34	8.00	2.465		5.13	2.42	93.6
4410	1.26	34.79	27.89	18	8.01	2.465	0.32	5.10	2.74	93.4
4420		34.80		17	8.01	2.465		5.11	2.71	93.6
4426	1.27	34.79	27.88	17	8.02	2.460	0.31	5.11	2.64	93.6
4432	1.28	34.77	27.86	21	8.03	2.460	0.30	5.11	2.61	94.8
Station 360: July 30, 1948; LMT, 1114—1330; 7° 29′ N, 45° 01′ W; depth bottom, 4430 m; wind, 2—4; sea, 1										
3935	2.28	34.92	27.90	28	7.86	2.415	0.50	5.89	1.67	43.5
4133	2.20	f)		27	7.99	2.405		5.82	1.74	43.1
4281	2.12	34.89	27.90	28	8.00	2.410	0.31	5.73	1.81	48.7
4380		34.88		28	8.01	2.410		5.70	1.84	53.5
4404	2.11	34.89	27.90	52	8.01	2.410	0.30	5.73	1.81	55.9
4414		34.80		30	8.03	2.410		5.67	1.81	52.0
4420	2.11	34.88	27.89	27	8.02	2.410	0.30	5.71	1.81	51.2
4426	2.10	34.89	27.89	57	8.03	2.410	0.29	5.66	1.77	51.2
tation 362: August 2, 1948; LMT, 1920—2205; 11° 44′ N, 51° 09′ W; depth bottom, 4974 m; wind, 2—4; sea, 1										
4475	2.74	34.89	27.84	20	7.77	2.400	0.57	5.80	1.90	43.5
4675	2.04	34.88	27.90	26	7.93	2.410	0.37	5.57	2.16	44.2
4824	1.82	34.84	27.88	28	7.93	2.425	0.36	5.48	2.19	53.5
4924		34.83		56	7.98	2.440		5.35	2.19	62.9
4949	1.68	34.82	27.85	42	7.98	2.440	0.31	5.35	2.22	60.9
4959		34.81		35	7.99	2.440		5.34	2.29	60.6
4965	1.67	34.83	27.88	34	8.00	2.440	0.29	5.34	2.26	60.6
4971	1.65	34.84	27.90	30	7.99	2.440	0.29	4.92	2.29	45.6
:ation 367: August 7, 1948; LMT, 0910—1150; 16° 51′ N, 58° 21′ W, depth bottom, 5655 m; wind, NE 9; sea, 3										
4700	2.18	34.89	27.89	30	7.93	2.415	0.37	5.62	0.61	52.0
5180	1.91	34.85	27.89	26	8.02	2.440	0.27	5.43	1.90	79.1
5369		34.84		30	8.04	2.450		5.35	1.94	76.0
5511 a)	1.90									
5606		34.86		29	8.03	2.470		5.34	2.00	72.0
5630	1.92	34.86	27.89	33	8.08	2.470	0.22	5.34	2.00	73.4
5639		34.87		34	8.06	2.475		5.34	1.96	71.6
5645	1.90			32	8.06					
5651	1.92	34.84	27.88	> 700	8.04	2.470	0.25	4.97	1.87	58.7

Depth D meters	Temperature t °C	Salinity S ‰	Density σ_t	Particle content s km^{-1}	Hydrogen ion pH	Alkalinity millival/L	Carbon dioxide CO_2 ml/L	Oxygen O_2 ml/L	Phosphate PO_4—P μg-atoms/L	Silicate SiO_2 μg-atoms
Station 371: August 21, 1948; LMT, 0520—0827; 24° 26′ N, 63° 28′ W; depth bottom, 5615 m; wind, 2; sea, 1										
1				45						
24				46						
47				42						
71				34						
95				30						
142				41						
189				26						
4655	2.30	34.99	27.96	33	8.00	2.405	0.30	5.42	1.81	41.0
5135	2.09	f)		35	8.01	2.405		5.40	2.22	61.6
5327	2.04	34.89	27.91	25	8.18	2.415	0.18	5.39	2.29	65.2
5471	2.07	34.85	27.87	42	8.19	2.415	0.17	5.38	2.29	65.5
5567		34.86		31	8.19	2.425		5.40	2.26	64.5
5591	2.07	34.85	27.87	48	8.19	2.430	0.17	5.37	2.29	64.5
5601				29						
5606	2.07	34.87	27.88	30	8.23	2.435	0.14	5.32	2.32	65.9
5612	2.06	34.98	27.97	>700	8.24	2.435	0.14	5.10	2.16	58.1
Station 373: August 24, 1948; LMT, 28° 05′ N, 60° 49′ W; depth bottom, 5917 m; wind, 2; sea, 1										
1	28.72	36.78	23.51	60	8.14	2.470	0.20	4.34	0.23	1.7
24	28.54	36.78	23.57	45	8.21	2.475	0.16	4.41	0.23	1.7
48	24.39	36.73	24.85	55	8.23	2.475	0.17	4.99	0.23	2.4
72	22.61	36.90	25.51	40	8.22	2.48	0.18	4.92	0.19	3.6
96	21.04	36.74	25.83	41	8.23	2.470	0.18	4.96	0.19	15.5
144	19.34	36.72	26.26	45	8.23	2.465	0.18	4.74	0.19	13.6
192	18.41	36.57	26.39	38	8.23	2.450	0.18	4.46	0.19	4.2
287 e)	17.81	36.49	26.48	24	8.22	2.440	0.18	4.39	0.16	8.8
383 e)	17.21	b)		137	8.18	2.440		3.75	0.26	9.4
479 e)	16.32	36.23	26.63	28	8.16	2.440	0.23	4.08	0.42	14.9
575 e)	14.66	35.95	26.80	32	8.14	2.425	0.25	3.97	0.39	16.1
767	10.31	35.34	27.19	26	8.03	2.405	0.38	3.30	1.55	18.4
958	6.77	35.07	27.52	24	8.03	2.400	0.42	3.94	2.04	22.1
1536	4.42	35.06	27.84	22	7.95	2.405	0.50	5.35	2.04	18.9
2007	3.65	35.01	27.84	19	8.04	2.400	0.38	5.56	2.13	23.0
2948	2.82	34.92	27.86	21	8.01	2.405	0.34	5.59	2.19	41.0
3889	2.37	34.92	27.89	29	8.02	2.435	0.31	5.66	2.19	45.2
4830	2.10	34.91	27.91	21	8.00	2.435	0.29	5.44	2.29	59.5
5771	2.11	34.90	27.91	24	7.97	2.435	0.29	5.36	2.42	80.6
5865	2.12	34.83	27.85	20	7.97	2.425	0.29	5.34	2.42	78.7
5890				23						
5904	2.11	34.86	27.87	72	7.98	2.425	0.28	5.33	2.52	77.3
5910	2.12	34.96	27.95	90	7.99	2.435	0.27	5.14	2.06	64.6
Station 384: September 3, 1948; LMT, 0755—1020; 36° 02′ N, 43° 03′ W; depth bottom, 4694 m; wind, SSW 6; sea, 2—										
3720	2.38	34.93	27.90	72	8.02	2.375	0.32	5.70	2.00	50.2
4201	2.28	34.96	27.93	44	8.06	2.405	0.27	5.82	2.13	45.5
4393	2.28			61						
4538	2.31	34.93	27.91	72	8.07	2.370	0.25	5.80	2.19	44.9
4634		34.93		41	8.09	2.400		5.73	2.16	42.8
4659	2.28	34.90	27.89	48	8.10	2.405	0.23	5.79	2.19	46.7
4669		34.93		54	8.18	2.395		5.79	2.19	46.7
4675	2.30			49						
4681	2.30	34.98	27.95	286	8.09	2.375	0.23	5.58	2.04	39.9
Station 387: September 7, 1948; LMT, 2311—2535; 40° 34′ N, 35° 52′ W; depth bottom, 4521 m; wind, W 1; sea,										
3540	2.51	34.91	27.87	25	7.97	2.375	0.37	6.00	1.35	33.5
4030	2.37	34.83	27.82	28	8.08	2.390	0.26	6.00	1.58	37.1
4225	2.38	f)		52	8.08	2.390		5.97	1.71	40.9

Depth D meters	Temperature t °C	Salinity S ‰	Density σ_t	Particle content s km^{-1}	Hydrogen ion pH	Alkalinity millival/L	Carbon dioxide CO_2 ml/L	Oxygen O_2 ml/L	Phosphate PO_4—P μg-atoms/L	Silicate SiO_2 μg-atoms/L
4372	2.38	34.92	27.89	43	8.08	2.390	0.25	5.96	1.74	41.6
4470		34.92		35	8.08	2.390		5.99	1.74	42.7
4494	2.38	34.93	27.90	28	8.08	2.400	0.24	5.93	1.81	42.7
4504		34.92		28	8.08	2.400		5.92	1.84	42.7
4510	2.38			47	8.08	2.400		5.96	1.87	42.4
4516	2.38	34.92	27.89	181	8.09	2.405	0.24	5.74	1.84	38.5
Station 400: September 14, 1948; LMT, 0715—1031, 1438—1537; 43° 04′ N, 19° 40′ W; depth bottom, 5990 m; wind, W 4; sea, 2										
1	20.08	35.82	25.39	165	8.17	2.410	0.22	4.96	0.09	4.6
24	19.83	35.80	25.43	78	8.21	2.445	0.19	5.10	0.06	3.6
47	17.54	35.87	26.06	88	8.24	2.410	0.18	5.44	0.09	3.7
71	15.01	35.89	26.67	75	8.23	2.400	0.20	5.26	0.13	3.7
94	14.07	35.84	26.83	71	8.20	2.400	0.22	5.05	0.61	3.7
141	13.22	35.79	26.98	32	8.19	2.360	0.22	5.09	0.68	7.5
188	12.87	35.72	27.00	42	8.19	2.365	0.24	5.19	0.74	9.5
283	12.20	35.63	27.05	30	8.19	2.365	0.24	5.11	0.77	13.1
377	11.89	35.62	27.11	43	8.15			5.12	0.84	12.8
471	11.52	35.59	27.15	30	8.13	2.315	0.29	4.95	1.06	13.5
670	10.61	35.57	27.31	37	8.10	2.365	0.31	4.36	1.23	18.4
769	9.95	35.51	27.38	30	8.07	2.345	0.34	4.12	1.39	22.5
968	8.91	35.54	27.57	54	8.06	2.345	0.35	4.23	1.67	24.1
1504	4.76	35.14	27.83	46	7.72	2.320	0.88	5.60	1.45	20.8
1986	c)	34.99		43	7.81	2.350		6.17	1.48	18.5
2951	2.90	34.97	27.89	39	8.05	2.390	0.33	5.65	1.48	32.8
3915	2.62	34.92	27.88	39	8.00	2.395	0.32	5.35	1.67	51.0
4880	2.71	34.92	27.87	36	7.98	2.395	0.30	5.17	1.84	50.2
5844	2.84	34.93	27.87	35	7.98	2.400	0.26	5.33	2.10	51.2
5940	2.84	34.94	27.88	71	7.98	2.400	0.26	5.31	1.96	50.2
5980		34.94		37						
5987	2.86	34.97	27.89	700	8.05	2.430	0.24	5.15	1.74	41.6

Table 2. Interpolated values of temperature, salinity, and density and results of dynamic computations.

Meters or decibars	Temp °C	Salinity ‰	σ_t	ΔD dynamic meters
Station 43: August 29, 1947; 6° 09′ N, 80° 26′ W				
0	27.17	33.25	21.38	
25	26.25	33.27	21.67	0.1574
50	20.40	34.58	24.36	0.2794
75	16.40	35.02	25.69	0.3535
100	15.10	35.03	25.99	0.4084
150	14.02	35.01	26.21	0.5064
200	13.22	34.98	26.35	0.5964
250	12.53	34.93	26.45	0.6811
300	11.75	34.85	26.54	0.7621
400	10.04	34.72	26.74	0.9121
500	8.67	34.67	26.93	1.0446
600	7.38	34.65	27.11	1.1601
700	6.38	34.61	27.21	1.2621
800	5.71	34.61	27.30	1.3556
900	5.23	34.61	27.36	1.4421
1000	4.80	34.61	27.41	1.523
1200	4.08	34.61	27.49	1.673
Station 45: August 30, 1947; 5° 13′ N, 81° 45′ W				
0	26.92	32.38	20.80	
25	27.26	32.99	21.15	0.1705
50	16.81	34.18	24.96	0.2916
75	15.46	34.93	25.83	0.3570
100	14.63	34.95	26.03	0.4098
150	13.62	34.94	26.24	0.5060
200	13.18	34.89	26.29	0.5965
250	12.57	34.88	26.41	0.6835
300	11.61	34.84	26.56	0.7650
400	9.54	34.81	26.90	0.9060
500	8.01	34.73	27.08	1.0225
600	6.93	34.61	27.14	1.1285
700	6.30	34.62	27.23	1.2280
Station 47: September 1, 1947; 3° 06′ N, 84° 38′ W				
0	26.10	33.43	21.84	
25	26.00	33.45	21.89	0.1491
50	16.50	35.05	25.69	0.2526
75	15.96	35.07	25.83	0.3092
100	15.40	35.06	25.94	0.3631
150	14.08	34.97	26.16	0.4636
200	13.74	34.93	26.20	0.5586
250	12.53	34.88	26.41	0.6481
300	11.06	34.83	26.65	0.7271
400	8.86	34.73	26.95	0.8606
500	7.70	34.66	27.05	0.9761
600	6.99	34.70	27.20	1.0806
700	6.58	34.63	27.20	1.1791
750	6.36	34.60	27.20	1.2286
Station 48: September 2, 1947; 1° 45′ N, 86° 14′ W				
0	25.25	34.03	22.55	
25	25.12	34.03	22.59	0.1324
50	16.10	35.11	25.84	0.2258
75	15.67	35.08	25.90	0.2798
100	15.20	35.05	25.99	0.3321
150	14.30	35.00	26.15	0.4316
200	13.50	34.97	26.28	0.5249
250	12.60	34.93	26.44	0.6116
300	11.40	34.88	26.63	0.6904
400	9.15	34.71	26.88	0.8279
500	8.00	34.67	27.03	0.9474
600	7.08	34.64	27.15	1.0554
700	6.27	34.64	27.25	1.1534
800	5.69	34.62	27.31	1.2444
900	5.20	34.56	27.32	1.3324
1000	4.70	34.55	27.37	1.4169
1200	3.93	34.57	27.48	1.572
1500	3.09	34.62	27.59	1.773
2000	2.16	34.66	27.71	2.050
2500	2.05	34.70	27.75	2.293
Station 49: September 3, 1947; 0° 33′ N, 87° 50′ W				
0	24.38	33.86	22.69	
25	24.10	33.86	22.77	0.1285
50	15.42	34.38	25.42	0.2246
75	15.22	34.96	25.90	0.2835
100	14.88	35.05	26.06	0.3350
150	13.51	34.99	26.30	0.4290
200	12.82	34.94	26.40	0.5155
250	12.02	34.89	26.53	0.5973
300	10.96	34.83	26.67	0.6730
400	8.80	34.73	26.96	0.8050
500	7.85	34.66	27.04	0.9205
600	7.10	34.62	27.13	1.0290
Station 52: September 7, 1947; 2° 52′ S, 89° 50′ W				
0	19.21	34.86	24.88	
25	18.81	34.87	24.99	0.0759
50	16.75	34.91	25.52	0.1445
75	14.93	35.01	26.01	0.2011
100	14.72	35.08	26.11	0.2508
150	14.16	35.04	26.21	0.3458
200	13.38	34.98	26.32	0.4365
250	12.51	34.94	26.46	0.5218
300	11.50	34.88	26.61	0.6008
400	8.67	34.68	26.95	0.7368
500	7.42	34.64	27.10	0.8498
600	6.82	34.61	27.15	0.9542
700	6.06	34.56	27.21	1.0542
800	5.39	34.54	27.29	1.1478
900	4.88	34.56	27.36	1.2342
1000	4.39	34.57	27.43	1.3138
1200	3.75	34.58	27.50	1.4598
1500	2.98	34.60	27.58	1.658
2000	2.30	34.62	27.66	1.950
2500	1.94	34.67	27.73	2.210

Meters or decibars	Temp °C	Salinity ‰	σ_t	ΔD dynamic meters
Station 55: September 8, 1947; 2°44′ S, 92°45′ W				
0	19.66	34.84	24.74	
25	19.29	34.82	24.83	0.0795
50	18.17	35.15	25.37	0.1518
75	14.19	35.07	26.22	0.2076
100	13.72	34.98	26.25	0.2531
150	13.48	34.96	26.28	0.3431
200	13.25	34.94	26.32	0.4321
250	12.80	34.92	26.39	0.5194
300	11.98	34.90	26.53	0.6024
400	9.10	34.71	26.89	0.7449
500	7.65	34.63	27.06	0.8623
600	6.72	34.61	27.17	0.9679
700	6.00	34.59	27.25	1.0649
Station 58: September 11, 1947; 1°04′ N, 93°20′ W				
0	23.00	33.98	23.18	
25	22.89	33.97	23.21	0.1175
50	15.04	35.01	25.99	0.2016
75	14.89	35.03	26.03	0.2523
100	14.69	35.03	26.07	0.3021
150	13.73	35.00	26.26	0.3969
200	13.36	34.98	26.33	0.4861
250	12.45	34.90	26.46	0.5714
300	11.33	34.81	26.58	0.6511
400	9.70	34.73	26.81	0.7946
500	8.36	34.67	26.98	0.9201
600	7.29	34.62	27.10	1.0331
700	6.64	34.60	27.17	1.1381
Station 59: September 12, 1947; 2°10′ N, 95°30′ W				
0	25.49	33.72	22.25	
25	25.46	33.78	22.30	0.1394
50	14.78	34.97	26.02	0.2340
75	14.47	35.04	26.14	0.2830
100	14.26	35.03	26.17	0.3305
150	13.60	34.97	26.26	0.4230
200	13.30	34.98	26.34	0.5120
250	12.77	34.93	26.41	0.5983
300	11.85	34.86	26.53	0.6808
400	9.66	34.73	26.82	0.8266
500	7.99	34.66	27.02	0.9498
600	7.20	34.61	27.10	1.0608
700	6.31	34.59	27.21	1.1633
800	5.38	34.58	27.32	1.2553
Station 60: September 13, 1947; 3°18′ N, 97°44′ W				
0	25.91	33.95	22.29	
25	25.90	33.95	22.29	0.1391
50	25.75	34.08	22.44	0.2766
75	17.95	34.88	25.21	0.3794
100	15.28	34.90	25.86	0.4415
150	13.44	34.94	26.28	0.5408
200	12.88	34.91	26.36	0.6288
250	12.49	34.88	26.42	0.7143
300	12.07	34.84	26.48	0.7975
400	10.42	34.74	26.70	0.9515
500	8.37	34.65	26.96	1.0835
600	7.20	34.61	27.10	1.1975
700	6.15	34.58	27.22	1.2995
Station 62: September 14, 1947; 4°33′ N, 100°07′ W				
0	25.96	33.74	22.12	
25	25.87	33.74	22.15	0.1428
50	25.51	34.00	22.45	0.2819
75	21.89	34.68	24.03	0.3988
100	13.78	34.83	26.12	0.4720
150	12.39	34.86	26.42	0.5620
200	11.01	34.74	26.60	0.6410
250	10.52	34.72	26.66	0.7148
300	10.04	34.71	26.73	0.7860
400	9.09	34.67	26.86	0.9200
500	8.02	34.63	27.01	1.0415
600	6.81	34.56	27.11	1.1525
700	6.04	34.55	27.20	1.2550
Station 63: September 15, 1947; 5°42′ N, 101°41′ W				
0	26.43	33.47	21.77	
25	26.61	33.45	21.70	0.1523
50	26.30	33.50	21.84	0.3039
75	22.50	34.67	23.84	0.4301
100	16.40	34.71	25.45	0.5135
150	12.45	34.86	26.41	0.6195
200	11.50	34.79	26.54	0.7003
250	10.81	34.76	26.64	0.7760
300	10.26	34.74	26.73	0.8478
400	9.13	34.69	26.88	0.9808
500	8.00	34.63	27.01	1.1013
600	6.87	34.58	27.13	1.2113
700	6.05	34.58	27.23	1.3113
Station 65: September 16, 1947; 6°21′ N, 103°42′ W				
0	26.47	33.12	21.49	
25	26.33	33.10	21.53	0.1576
50	25.23	34.17	22.67	0.3014
75	19.26	34.64	24.70	0.4075
100	14.30	34.80	25.99	0.4743
150	12.21	34.84	26.45	0.5665
200	11.43	34.78	26.54	0.6463
250	10.95	34.77	26.63	0.7223
300	10.45	34.76	26.70	0.7945
400	9.52	34.71	26.82	0.9315
500	7.95	34.62	27.01	1.0550
600	6.88	34.59	27.14	1.1645
700	6.06	34.58	27.23	1.2640
800	5.50	34.57	27.29	1.3570
900	5.05	34.58	27.36	1.4440
1000	4.58	34.58	27.42	1.524
1200	3.82	34.59	27.51	1.670
1500	3.07	34.59	27.57	1.868
2000	2.33	34.63	27.67	2.158
2500	1.90	34.67	27.74	2.406
3000	1.70	34.68	27.76	2.631

Meters or decibars	Temp °C	Salinity ‰	σ_t	ΔD dynamic meters
Station 67: September 18, 1947: 7° 38′ N, 106° 17′ W				
0	26.80	33.27	21.50	
25	26.74	33.43	21.64	0.1561
50	24.00	34.19	23.05	0.2940
75	15.10	34.67	25.71	0.3835
100	12.92	34.78	26.26	0.4349
150	11.64	34.77	26.50	0.5194
200	10.91	34.73	26.61	0.5961
250	10.49	34.71	26.65	0.6699
300	10.06	34.70	26.72	0.7416
400	9.30	34.67	26.83	0.8776
500	7.90	34.60	26.99	1.0016
600	6.88	34.59	27.14	1.1121
700	6.10	34.53	27.21	1.2126
Station 69: September 19, 1947; 8° 22′ N, 108° 00′ W				
0	27.23	33.75	21.73	
25	26.75	33.80	21.92	0.1501
50	26.64	33.81	21.96	0.2978
75	23.05	34.40	23.49	0.4269
100	15.80	34.70	25.57	0.5131
150	12.57	34.82	26.36	0.6176
200	11.54	34.79	26.53	0.6999
250	10.91	34.73	26.61	0.7766
300	10.32	34.69	26.68	0.8501
400	9.47	34.67	26.80	0.9891
500	8.31	34.60	26.93	1.1176
600	7.19	34.55	27.05	1.2351
700	6.13	34.55	27.19	1.3406
800	5.51	34.55	27.27	1.4361
900	5.02	34.55	27.34	1.525
Station 70: September 20, 1947; 9° 14′ N, 109° 39′ W				
0	26.93	33.59	21.70	
25	26.80	33.59	21.74	0.1526
50	26.35	33.98	22.17	0.2999
75	22.00	34.65	23.97	0.4208
100	13.70	34.82	26.12	0.4948
150	12.63	34.83	26.35	0.5865
200	11.90	34.82	26.49	0.6698
250	11.30	34.77	26.56	0.7485
300	10.70	34.72	26.63	0.8245
400	9.50	34.69	26.81	0.9655
500	7.81	34.61	27.02	1.0890
600	6.80	34.59	27.15	1.1975
700	6.08	34.56	27.21	1.2975
800	5.49	34.56	27.29	1.3910
900	4.88	34.56	27.36	1.4775
Station 72: September 21, 1947; 10° 35′ N, 112° 05′ W				
0	27.93	33.65	21.43	
25	27.28	33.68	21.65	0.1569
50	22.92	34.48	23.58	0.2883
75	16.85	34.69	25.34	0.3759
100	13.60	34.81	26.13	0.4334
150	11.85	34.80	26.49	0.5214
200	11.17	34.79	26.60	0.5986
250	10.78	34.77	26.66	0.6724
300	10.18	34.73	26.73	0.7436
400	8.68	34.62	26.89	0.8761
500	7.29	34.57	27.06	0.9931
600	6.13	34.55	27.19	1.0966
700	5.48	34.54	27.28	1.1901
800	5.01	34.54	27.34	1.2771
900	4.63	34.55	27.38	1.3596
Station 74: September 22, 1947; 11° 39′ N, 114° 15′ W				
0	27.75	34.19	21.88	
25	27.30	34.17	22.02	0.1471
50	21.97	34.55	23.90	0.2704
75	16.35	34.43	25.25	0.3553
100	14.13	34.74	25.98	0.4155
150	12.13	34.82	26.44	0.5083
200	11.32	34.77	26.56	0.5878
250	10.71	34.76	26.66	0.6625
300	10.18	34.75	26.74	0.7335
400	9.12	34.67	26.86	0.8670
500	7.60	34.58	27.03	0.9875
600	6.62	34.56	27.14	1.0955
700	5.90	34.57	27.24	1.1940
800	5.33	34.57	27.32	1.2845
900	4.82	34.56	27.37	1.3690
1000	4.30	34.55	27.42	1.4485
1200	3.64	34.59	27.51	1.595
1500	2.94	34.62	27.61	1.787
2000	2.11	34.64	27.70	2.062
2500	1.83	34.66	27.73	2.309
3000	1.70	34.67	27.75	2.544
Station 76: September 24, 1947; 13° 20′ N, 117° 58′ W				
0	27.62	33.84	21.66	
25	27.62	33.84	21.66	0.1541
50	23.93	34.51	23.31	0.2888
75	20.04	34.42	24.33	0.3918
100	17.13	34.52	25.14	0.4731
150	12.69	34.74	26.27	0.5899
200	11.50	34.74	26.50	0.6746
250	10.86	34.72	26.60	0.7521
300	10.22	34.69	26.69	0.8256
400	9.00	34.61	26.83	0.9626
500	7.71	34.56	26.99	1.0866
600	6.56	34.55	27.15	1.1961
700	5.80	34.53	27.23	1.2941
800	5.30	34.53	27.29	1.3861
900	4.90	34.54	27.35	1.4731
Station 77: September 25, 1947; 14° 13′ N, 120° 25′ W				
0	27.89	33.91	21.64	
25	27.67	33.92	21.72	0.1535
50	26.32	34.26	22.40	0.2983
75	23.24	34.51	23.51	0.4219
100	18.37	34.47	24.80	0.5170
150	13.10	34.72	26.17	0.6443
200	11.58	34.75	26.49	0.7318

Meters or decibars	Temp °C	Salinity ‰	σ_t	ΔD dynamic meters
250	10.98	34.74	26.60	0.8095
300	10.38	34.73	26.70	0.8828
400	9.15	34.64	26.84	1.0188
500	7.71	34.58	27.01	1.1413
600	6.78	34.56	27.12	1.2518
700	6.07	34.56	27.21	1.3533
800	5.48	34.56	27.29	1.4468
900	4.96	34.57	27.36	1.533

Station 78: September 26, 1947; 15° 40′ N, 123° 21′ W

0	27.74	33.88	21.66	
25	27.68	33.89	21.68	0.1539
50	27.86	33.91	21.64	0.3081
75	23.57	34.49	23.40	0.4421
100	18.24	34.45	24.81	0.5385
150	13.07	34.52	26.03	0.6688
200	11.55	34.71	26.46	0.7603
250	10.70	34.71	26.62	0.8383
300	10.00	34.67	26.71	0.9110
400	8.45	34.56	26.88	1.0445
500	7.34	34.53	27.02	1.1635
600	6.49	34.52	27.13	1.2720
700	5.87	34.53	27.22	1.3715
800	5.27	34.54	27.30	1.4635
900	4.74	34.55	27.37	1.549

Station 79: September 29, 1947; 16° 35′ N, 124° 48′ W

0	26.35	34.28	22.40	
25	26.27	34.31	22.45	0.1359
50	22.00	34.49	23.86	0.2546
75	19.10	34.38	24.54	0.3485
100	15.66	34.22	25.24	0.4260
150	11.93	34.32	26.09	0.5448
200	10.50	34.47	26.47	0.6342
250	10.12	34.57	26.62	0.7118
300	9.62	34.61	26.73	0.7838
400	8.31	34.53	26.88	0.9158
500	7.19	34.51	27.02	1.0348
600	6.35	34.53	27.15	1.1423
700	5.76	34.49	27.21	1.2408
800	5.20	34.47	27.26	1.3338
900	4.67	34.51	27.35	1.4208

Station 80: September 28, 1947; 17° 46′ N, 126° 51′ W

0	25.63	34.54	22.82	
25	25.46	34.56	22.89	0.1256
50	23.10	34.61	23.63	0.2419
75	20.03	34.53	24.41	0.3401
100	18.82	34.40	24.62	0.4266
150	14.07	34.21	25.58	0.5721
200	11.40	34.33	26.20	0.6806
250	10.48	34.52	26.52	0.7674
300	9.79	34.62	26.71	0.8424
400	8.53	34.48	26.81	0.9794
500	7.48	34.46	26.94	1.1064
600	6.44	34.46	27.08	1.2204
700	5.82	34.48	27.19	1.3224
800	5.29	34.50	27.26	1.4164

Meters or decibars	Temp °C	Salinity ‰	σ_t	ΔD dynamic meters
900	4.80	34.51	27.33	1.505
1000	4.30	34.52	27.40	1.587
1200	3.70	34.54	27.48	1.738
1500	2.98	34.55	27.54	1.945
2000	2.19	34.59	27.65	2.248
2500	1.81	34.63	27.71	2.510
3000	1.62	34.65	27.74	2.750
4000	1.49	34.67	27.77	3.205

Station 81: September 29, 1947; 15° 34′ N, 127° 11′ W

0	27.34	34.15	21.99	
25	26.90	34.22	22.19	0.1438
50	23.13	34.42	23.47	0.2701
75	20.50	34.54	24.30	0.3716
100	18.77	34.45	24.67	0.4589
150	13.13	34.21	25.77	0.5986
200	11.90	34.67	26.37	0.6986
250	10.93	34.66	26.54	0.7809
300	10.10	34.63	26.67	0.8564
400	8.86	34.55	26.80	0.9959
500	7.65	34.53	26.98	1.1219
600	6.52	34.49	27.11	1.2334
700	5.71	34.49	27.22	1.3329
800	5.19	34.49	27.28	1.4244
900	4.72	34.49	27.33	1.512

Station 82: September 30, 1947; 13° 19′ N, 127° 25′ W

0	27.32	33.89	21.80	
25	27.16	33.87	21.85	0.1500
50	22.60	34.42	23.63	0.2785
75	18.55	34.57	24.82	0.3718
100	14.60	34.77	25.90	0.4380
150	12.42	34.90	26.45	0.5323
200	11.71	34.80	26.51	0.6128
250	11.24	34.78	26.58	0.6908
300	10.76	34.76	26.65	0.7658
400	9.75	34.72	26.79	0.9068
500	8.68	34.64	26.91	1.0373
600	7.48	34.58	27.04	1.1568
700	6.45	34.55	27.15	1.2648
800	5.77	34.55	27.24	1.3638
900	5.19	34.56	27.32	1.4548

Station 84: September 30, 1947; 12° 32′ N, 127° 31′ W

0	27.59	34.07	21.85	
25	27.16	34.09	22.00	0.1475
50	21.73	34.51	23.94	0.2704
75	16.39	34.61	25.38	0.3533
100	13.70	34.81	26.11	0.4104
150	12.18	34.85	26.46	0.4994
200	11.45	34.79	26.55	0.5786
250	11.02	34.77	26.62	0.6546
300	10.58	34.77	26.69	0.7276
400	9.64	34.69	26.79	0.8666
500	8.57	34.66	26.93	0.9961
600	7.53	34.59	27.05	1.1146
700	6.53	34.54	27.14	1.2236
800	5.62	34.54	27.26	1.3226
900	5.12	34.55	27.32	1.4126

Meters or decibars	Temp °C	Salinity ‰	σ_t	ΔD dynamic meters
Station 85: October 1, 1947; 11°30′ N, 127°37′ W				
0	27.97	33.81	21.53	
25	27.13	33.90	21.88	0.1530
50	19.20	34.41	24.54	0.2704
75	14.50	34.74	25.90	0.3399
100	13.00	34.81	26.26	0.3889
150	12.00	34.79	26.45	0.4744
200	11.43	34.79	26.55	0.5539
250	10.95	34.78	26.63	0.6296
300	10.45	34.74	26.69	0.7024
400	9.36	34.64	26.77	0.8424
500	8.12	34.62	26.98	0.9699
600	7.20	34.57	27.07	1.0839
700	6.39	34.55	27.16	1.1899
800	5.55	34.55	27.27	1.2869
900	4.95	34.56	27.36	1.3744
Station 86: October 2, 1947; 9°50′ N, 128°13′ W				
0	27.50	33.12	21.16	
25	25.50	33.71	22.24	0.1531
50	18.53	34.49	24.78	0.2633
75	13.86	34.79	26.07	0.3279
100	12.58	34.77	26.31	0.3743
150	11.55	34.81	26.54	0.4565
200	10.99	34.76	26.61	0.5325
250	10.50	34.73	26.67	0.6058
300	10.02	34.69	26.73	0.6768
400	9.03	34.65	26.86	0.8108
500	7.97	34.58	26.97	0.9343
600	6.96	34.56	27.10	1.0478
700	6.07	34.54	27.20	1.1508
800	5.56	34.52	27.25	1.2468
900	5.18	34.52	27.30	1.3383
Station 87: October 3, 1947; 8°25′ N, 128°48′ W				
0	27.29	33.96	21.87	
25	27.29	33.97	21.88	0.1490
50	27.33	34.28	22.09	0.2956
75	23.85	34.61	23.41	0.4243
100	15.98	34.45	25.34	0.5143
150	12.05	34.69	26.36	0.6243
200	11.00	34.73	26.59	0.7050
250	10.58	34.74	26.67	0.7788
300	10.13	34.73	26.74	0.8495
400	9.35	34.69	26.84	0.9840
500	8.40	34.65	26.96	1.1090
600	7.37	34.61	27.08	1.2235
700	6.58	34.58	27.16	1.3295
800	5.81	34.56	27.25	1.4280
900	5.38	34.56	27.30	1.520
1000	5.00	34.57	27.36	1.605
1200	4.60	34.60	27.42	1.768
1500	3.90	34.64	27.54	1.992
2000	2.30	34.63	27.67	2.300
2500	1.90	34.66	27.73	2.554
3000	1.70	34.66	27.74	2.789
4000	1.46	34.72	27.81	3.229

Meters or decibars	Temp °C	Salinity ‰	σ_t	ΔD dynamic meters
Station 88: October 4, 1947; 6°44′ N, 129°28′ W				
0	27.47	34.65	22.33	
25	27.71	34.64	22.25	0.1390
50	26.80	34.77	22.63	0.2746
75	24.40	34.80	23.39	0.3970
100	23.05	34.95	23.91	0.5044
150	19.57	34.83	24.76	0.6869
200	11.88	34.79	26.47	0.8086
250	10.69	34.77	26.67	0.8851
300	10.13	34.75	26.75	0.9556
400	9.34	34.70	26.84	1.0896
500	8.50	34.65	26.94	1.2156
600	6.85	34.60	27.14	1.3286
700	6.01	34.59	27.25	1.4271
800	5.60	34.58	27.29	1.519
900	5.12	34.56	27.33	1.607
Station 89: October 5, 1947; 4°49′ N, 130°52′ W				
0	24.66	34.63	23.19	
25	24.47	34.64	23.26	0.1168
50	24.57	34.66	23.23	0.2333
75	23.82	34.75	23.52	0.3469
100	23.50	34.80	23.66	0.4556
150	22.42	34.87	24.02	0.6619
200	20.01	34.85	24.67	0.8446
250	14.85	34.75	25.82	0.9849
300	10.12	34.66	26.68	1.0774
400	9.60	34.70	26.80	1.2164
500	8.85	34.66	26.89	1.3469
600	7.90	34.61	27.00	1.4694
700	6.83	34.59	27.15	1.580
800	5.83	34.58	27.27	1.678
900	5.23	34.57	27.33	1.767
Station 90: October 6, 1947; 3°05′ N, 133°06′ W				
0	24.50	34.69	23.28	
25	24.42	34.65	23.27	0.1155
50	23.78	34.72	23.52	0.2284
75	22.61	34.72	23.86	0.3345
100	22.30	34.81	24.01	0.4350
150	15.95	34.92	25.71	0.5920
200	13.22	34.95	26.34	0.6940
250	12.58	34.91	26.42	0.7800
300	11.93	34.86	26.51	0.8628
400	10.53	34.75	26.68	1.0168
500	9.00	34.67	26.88	1.1538
600	7.35	34.60	27.07	1.2728
700	6.22	34.57	27.20	1.3768
800	5.57	34.56	27.27	1.4718
900	4.92	34.56	27.36	1.559
Station 91: October 7, 1947; 1°49′ N, 134°45′ W				
0	24.38	34.72	23.34	
25	24.18	34.73	23.41	0.1131
50	23.48	34.76	23.63	0.2231
75	21.44	34.94	24.35	0.3221
100	19.75	34.90	24.77	0.4076

Meters or decibars	Temp °C	Salinity ‰	σ_t	ΔD dynamic meters
150	13.65	34.90	26.22	0.5344
200	12.78	34.91	26.38	0.6234
250	12.18	34.86	26.46	0.7074
300	11.70	34.85	26.55	0.7881
400	10.69	34.84	26.72	0.9386
500	8.52	34.70	26.97	1.0701
600	7.23	34.55	27.05	1.1861
700	6.45	34.52	27.14	1.2941
800	5.80	34.52	27.22	1.3946
900	5.24	34.53	27.30	1.4876

Station 93: October 8, 1947 0°06′ S, 135°58′ W

0	22.75	35.20	24.18	
25	22.73	35.24	24.21	0.0935
50	22.59	35.23	24.24	0.1865
75	21.75	35.24	24.49	0.2765
100	19.48	35.21	25.08	0.3566
150	13.82	35.04	26.28	0.4744
200	12.58	34.96	26.46	0.5599
250	11.78	34.88	26.56	0.6394
300	10.91	34.81	26.66	0.7146
400	8.68	34.67	26.93	0.8486
500	7.61	34.64	27.08	0.9636
600	6.90	34.61	27.14	1.0696
700	6.26	34.57	27.19	1.1711
800	5.66	34.55	27.25	1.2676
900	5.09	34.55	27.33	1.3576
1000	4.63	34.56	27.39	1.4406
1200	3.96	34.57	27.47	1.594
1500	3.12	34.60	27.57	1.799
2000	2.21	34.66	27.70	2.087
2500	1.87	34.66	27.73	2.334
3000	1.71	34.68	27.76	2.567
4000	1.39	34.70	27.79	3.007

Station 94: October 9, 1947; 3°00′ S, 136°26′ W

0	24.53	35.33	23.75	
25	24.32	35.33	23.81	0.1034
50	24.28	35.31	23.82	0.2061
75	24.17	35.36	23.89	0.3083
100	19.19	35.48	25.35	0.3924
150	13.16	34.96	26.35	0.5024
200	12.78	34.94	26.41	0.5876
250	12.36	34.89	26.46	0.6709
300	11.71	34.84	26.54	0.7519
400	9.89	34.75	26.79	0.8989
500	7.91	34.67	27.04	1.0224
600	6.74	34.64	27.19	1.1279
700	5.98	34.60	27.25	1.2239
800	5.28	34.56	27.31	1.3144
900	4.85	34.56	27.37	1.3994

Station 102: November 5, 1947; 13°25′ S, 149°30′ W

0	27.74	36.22	23.42	
25	27.71	36.18	23.40	0.1124
50	27.50	36.38	23.62	0.2226
75	27.35	36.34	23.64	0.3303
100	27.33	36.34	23.64	0.4379
150	24.40	36.30	24.52	0.6329
200	23.50	36.38	24.85	0.7999
250	19.92	35.77	25.39	0.9469
300	16.10	35.19	25.89	1.0694
400	10.10	34.60	26.64	1.2549
500	7.75	34.51	26.94	1.3909
600	6.10	34.50	27.17	1.502
700	5.51	34.50	27.24	1.598
800	5.08	34.50	27.29	1.690
900	4.66	34.50	27.34	1.777

Station 105: November 10, 1947; 7°38′ S, 152°53′ W

0	27.35	35.67	23.13	
25	27.29	35.62	23.12	0.1190
50	27.27	35.62	23.13	0.2383
75	27.28	35.65	23.13	0.3576
100	27.26	35.81	23.26	0.4758
150	25.75	36.29	24.10	0.6898
200	21.10	35.96	25.21	0.8580
250	16.05	35.16	25.88	0.9843
300	11.53	34.88	26.60	1.0778
400	9.28	34.81	26.95	1.2143
500	8.43	34.67	26.97	1.3338
600	6.80	34.57	27.13	1.4458
700	6.02	34.56	27.22	1.546
800	5.30	34.56	27.31	1.638
900	4.72	34.58	27.40	1.722
1000	4.23	34.59	27.46	1.797
1200	3.50	34.60	27.53	1.936
1500	2.78	34.60	27.60	2.125
2000	2.18	34.61	27.66	2.410
2500	1.86	34.63	27.71	2.673
3000	1.65	34.65	27.74	2.913

Station 108: November 13, 1947; 2°01′ S, 152°16′ W

0	25.52	35.24	23.39	
25	25.58	35.24	23.37	0.1130
50	25.32	35.23	23.44	0.2256
75	25.22	35.22	23.46	0.3375
100	25.02	35.21	23.52	0.4486
150	23.75	35.50	24.11	0.6561
200	13.70	35.10	26.34	0.7971
250	12.00	34.91	26.53	0.8809
300	11.31	34.82	26.60	0.9586
400	10.19	34.78	26.76	1.1041
500	8.20	34.64	26.99	1.2321
600	6.92	34.58	27.12	1.3436
700	6.26	34.57	27.20	1.4456
800	5.61	34.57	27.28	1.540
900	4.87	34.57	27.37	1.627

Station 111: November 15, 1947; 0°02′ N, 152°07′ W

0	25.19	35.11	23.39	
25	25.25	35.12	23.37	0.1130
50	25.25	35.21	23.45	0.2255
75	24.91	35.25	23.59	0.3356
100	23.73	35.25	23.94	0.4401
150	18.38	35.29	25.41	0.6064

Meters or decibars	Temp °C	Salinity ‰	σ_t	ΔD dynamic meters
200	13.83	34.99	26.23	0.7186
250	12.30	34.90	26.47	0.8061
300	11.39	34.85	26.61	0.8863
400	10.10	34.74	26.75	1.0319
500	8.09	34.61	26.98	1.1609
600	6.94	34.61	27.14	1.2719
700	6.21	34.57	27.20	1.3728
800	5.45	34.55	27.28	1.4669
900	4.95	34.55	27.35	1.554
1000	4.57	34.57	27.41	1.635
1200	3.95	34.61	27.50	1.784
1500	3.12	34.66	27.62	1.979
2000	2.25	34.68	27.72	2.249
Station 113: November 16, 1947; 2°06′ N, 149°49′ W				
0	24.74	35.16	23.57	
25	24.88	35.16	23.53	0.1089
50	24.69	35.16	23.58	0.2179
75	24.63	35.15	23.59	0.3264
100	24.57	35.14	23.60	0.4349
150	24.00	35.12	23.75	0.6489
200	12.03	34.76	26.41	0.7964
250	11.55	34.80	26.54	0.8776
300	11.09	34.82	26.63	0.9541
400	9.89	34.74	26.79	1.0966
500	8.56	34.67	26.94	1.2261
600	6.90	34.61	27.14	1.3396
700	6.10	34.57	27.22	1.4396
800	5.48	34.55	27.28	1.533
900	4.92	34.56	27.36	1.619
Station 115: November 17, 1947; 4°04′ N, 149°42′ W				
0	26.70	34.97	22.81	
25	26.58	34.96	22.84	0.1263
50	25.35	35.00	23.26	0.2474
75	24.96	35.15	23.49	0.3610
100	24.71	35.14	23.56	0.4712
150	24.06	35.07	23.69	0.6878
200	13.47	34.67	26.06	0.8450
250	10.95	34.70	26.57	0.9338
300	10.08	34.74	26.76	1.0065
400	9.30	34.71	26.86	1.1390
500	8.38	34.66	26.96	1.2630
Station 116: November 18, 1947; 5°47′ N, 149°42′ W				
0	27.49	34.92	22.52	
25	27.30	34.92	22.58	0.1329
50	27.26	34.96	22.62	0.2648
75	27.29	34.93	22.59	0.3968
100	27.13	34.95	22.67	0.5284
150	22.53	34.89	24.01	0.7584
200	12.09	34.68	26.34	0.9014
250	10.50	34.67	26.63	0.9821
300	9.52	34.67	26.79	1.0524
400	8.80	34.67	26.91	1.1809
500	8.08	34.64	27.01	1.3004
600	6.90	34.60	27.13	1.4104
700	6.00	34.57	27.23	1.510
800	5.40	34.55	27.29	1.603
900	4.95	34.56	27.36	1.689
Station 119: November 21, 1947; 8°43′ N, 148°36′ W				
0	27.46	33.61	21.55	
25	27.61	33.85	21.68	0.1551
50	24.69	34.52	23.09	0.2921
75	18.54	34.72	24.94	0.3904
100	14.32	34.60	25.83	0.4561
150	11.30	34.66	26.47	0.5514
200	10.32	34.72	26.70	0.6261
250	9.83	34.69	26.76	0.6946
300	9.31	34.67	26.83	0.7606
400	8.58	34.68	26.95	0.8851
500	7.90	34.60	26.99	1.0036
600	7.09	34.59	27.11	1.1156
700	6.19	34.58	27.22	1.2171
800	5.45	34.57	27.30	1.3096
900	4.95	34.57	27.37	1.3951
Station 121: November 23, 1947; 11°25′ N, 149°33′ W				
0	26.49	33.95	22.11	
25	26.53	34.07	22.19	0.1424
50	26.45	34.02	22.18	0.2841
75	22.20	34.90	24.10	0.4034
100	19.59	34.90	24.81	0.4914
150	12.88	34.45	26.00	0.6224
200	10.97	34.52	26.43	0.7153
250	10.04	34.58	26.64	0.7936
300	9.50	34.63	26.77	0.8641
400	8.41	34.62	26.94	0.9916
500	7.39	34.55	27.03	1.1076
600	6.30	34.55	27.17	1.2136
700	5.55	34.56	27.28	1.3081
800	5.06	34.57	27.35	1.3946
900	4.61	34.56	27.39	1.4761
Station 122: November 24, 1947; 13°24′ N, 151°12′ W				
0	26.54	33.88	22.04	
25	26.50	33.89	22.06	0.1448
50	26.40	33.91	22.11	0.2890
75	20.75	34.90	24.51	0.4043
100	16.80	34.60	25.27	0.4819
150	11.26	34.33	26.23	0.5961
200	10.34	34.46	26.49	0.6816
250	9.62	34.52	26.66	0.7574
300	8.90	34.53	26.79	0.8266
400	7.73	34.50	26.94	0.9531
500	6.80	34.48	27.06	1.0676
600	5.92	34.49	27.19	1.1706
700	5.29	34.52	27.29	1.2631
800	4.78	34.54	27.36	1.3486
900	4.41	34.53	27.40	1.4291
Station 123: November 24, 1947;, 15°14′ N, 152°49′ W				
0	25.92	33.96	22.29	
25	25.90	34.02	22.35	0.1384

Meters or decibars	Temp °C	Salinity ‰	σ_t	ΔD dynamic meters
50	25.94	34.58	22.76	0.2714
75	23.55	34.75	23.60	0.3896
100	20.84	34.76	24.37	0.4888
150	16.58	34.58	25.31	0.6468
200	12.03	34.35	26.09	0.7643
250	10.58	34.42	26.42	0.8558
300	9.57	34.53	26.68	0.9335
400	8.26	34.53	26.89	1.0670
500	7.16	34.51	27.03	1.1850
600	6.08	34.51	27.17	1.2905
700	5.35	34.50	27.26	1.3855
800	4.91	34.52	27.34	1.4735
900	4.54	34.56	27.40	1.555
1000	4.11	34.57	27.46	1.630
1200	3.48	34.58	27.52	1.769
1500	2.77	34.60	27.60	1.958
2000	2.06	34.64	27.70	2.231
2500	1.78	34.65	27.73	2.476
3000	1.60	34.67	27.76	2.706
4000	1.40	34.69	27.79	3.141
5000	1.40	34.70	27.79	3.581

Station 126: December 17, 1947; 14° 39′ N, 164° 50′ W

0	26.13	34.50	22.64	
25	26.14	34.51	22.65	0.1305
50	26.09	34.58	22.71	0.2604
75	24.16	34.86	23.50	0.3804
100	21.84	34.97	24.26	0.4823
150	16.60	34.72	25.41	0.6410
200	11.35	34.41	26.27	0.7520
250	10.13	34.48	26.55	0.8363
300	9.52	34.55	26.70	0.9105
400	8.36	34.59	26.92	1.0420
500	7.22	34.55	27.05	1.1658
600	6.49	34.55	27.15	1.2640
700	5.87	34.57	27.25	1.3610
800	5.33	34.58	27.33	1.4500
900	4.83	34.58	27.39	1.5330

Station 128: December 18, 1947; 12° 16′ N, 166° 48′ W

0	26.23	34.45	22.57	
25	26.13	34.45	22.60	0.1320
50	26.24	34.43	22.56	0.2644
75	23.44	35.00	23.83	0.3823
100	21.23	35.10	24.53	0.4768
150	17.08	34.77	25.34	0.6305
200	12.23	34.53	26.19	0.7453
250	10.53	34.53	26.51	0.8325
300	9.59	34.54	26.69	0.9080
400	8.52	34.56	26.87	1.0425
500	7.51	34.51	26.98	1.1650
600	6.62	34.50	27.10	1.2775
700	5.83	34.52	27.22	1.3785
800	5.07	34.54	27.33	1.4690
900	4.65	34.55	27.38	1.552
1000	4.22	34.56	27.44	1.629
1200	3.73	34.58	27.51	1.772
1500	3.03	34.60	27.58	1.969
2000	2.19	34.65	27.69	2.254
2500	1.89	34.67	27.74	2.501
3000	1.69	34.68	27.76	2.729
4000	1.43	34.70	27.79	3.164

Station 129: December 19, 1947; 10° 10′ N, 168° 02′ W

0	26.33	34.30	22.42	
25	26.25	34.29	22.43	0.1358
50	26.15	34.26	22.45	0.2715
75	23.30	34.73	23.66	0.3929
100	20.10	35.12	24.84	0.4858
150	14.36	34.53	25.77	0.6215
200	10.68	34.38	26.38	0.7213
250	10.00	34.52	26.60	0.8015
300	9.56	34.60	26.73	0.8738
400	8.72	34.60	26.87	1.0068
500	7.88	34.63	27.03	1.1268
600	6.85	34.55	27.10	1.2373
700	6.13	34.56	27.20	1.3403
800	5.47	34.56	27.29	1.4343
900	5.00	34.58	27.37	1.520

Station 130: December 20, 1947; 8° 40′ N, 169° 28′ W

0	27.50	34.27	22.03	
25	27.51	34.30	22.05	0.1450
50	27.48	34.36	22.10	0.2895
75	25.58	35.01	23.19	0.4206
100	20.50	34.85	24.53	0.5230
150	13.30	34.56	26.01	0.6608
200	10.98	34.66	26.53	0.7513
250	10.18	34.69	26.70	0.8258
300	9.68	34.70	26.79	0.8943
400	8.88	34.66	26.89	1.0233
500	8.00	34.61	26.99	1.1443
600	6.25	34.56	27.19	1.2518
700	5.80	34.56	27.25	1.3468
800	5.38	34.56	27.30	1.4373
900	4.91	34.57	27.37	1.523

Station 131: December 21, 1947; 6° 21′ N, 171° 52′ W

0	28.48	34.61	21.96	
25	28.05	34.63	22.12	0.1450
50	28.14	34.71	22.15	0.2880
75	27.28	34.75	22.45	0.4274
100	24.23	34.96	23.56	0.5501
150	14.29	34.47	25.74	0.7174
200	10.67	34.68	26.61	0.8124
250	9.75	34.69	26.77	0.8831
300	9.23	34.68	26.85	0.9484
400	8.45	34.63	26.96	1.0709
500	7.73	34.62	27.04	1.1859
600	6.73	34.56	27.13	1.2944
700	6.00	34.55	27.21	1.3954
800	5.46	34.55	27.28	1.4889
900	4.98	34.54	27.34	1.576

Meters or decibars	Temp °C	Salinity ‰	σ_t	ΔD dynamic meters
Station 133: December 22, 1947; 5° 00′ N, 172° 02′ W				
0	28.21	34.85	22.24	
25	28.25	34.86	22.23	0.1403
50	28.36	34.86	22.19	0.2814
75	28.07	34.88	22.31	0.4219
100	25.87	34.85	22.99	0.5531
150	18.08	34.83	25.14	0.7486
200	12.19	34.59	26.25	0.8666
250	10.25	34.64	26.65	0.9489
300	9.19	34.68	26.86	1.0169
400	8.41	34.66	26.96	1.1384
500	7.80	34.62	27.03	1.2534
600	6.80	34.62	27.17	1.3604
700	5.90	34.57	27.24	1.4579
800	5.35	34.55	27.30	1.549
900	4.95	34.58	27.38	1.634
1000	4.50	34.60	27.43	1.713
1200	3.80	34.60	27.51	1.858
1500	2.99	34.61	27.59	2.053
2000	2.22	34.66	27.70	2.333
2500	1.83	34.67	27.74	2.578
3000	1.67	34.68	27.76	2.805
4000	1.39	34.70	27.79	3.240
5000	1.27	34.71	27.81	3.680
Station 135: December 24. 1947; 2° 54′ N, 173° 17′ W				
0	27.80	35.07	22.53	
25	27.59	35.08	22.60	0.1325
50	27.58	35.09	22.62	0.2641
75	27.54	35.09	22.63	0.3956
100	27.34	35.11	22.72	0.5261
150	26.50	35.16	23.02	0.7786
200	22.80	35.05	24.05	1.0004
250	12.20	34.83	26.44	1.1409
300	10.53	34.75	26.68	1.2186
400	9.85	34.71	26.77	1.3591
500	8.70	34.64	26.91	1.4906
600	7.30	34.60	27.08	1.608
700	6.22	34.58	27.21	1.711
800	5.61	34.57	27.28	1.805
900	5.04	34.56	27.34	1.893
Station 137: December 25, 1947; 1° 00′ N, 176° 32′ W				
0	27.63	35.40	22.83	
25	27.44	35.38	22.89	0.1255
50	27.42	35.39	22.90	0.2505
75	27.40	35.38	22.90	0.3756
100	27.36	35.39	22.92	0.5008
150	27.07	35.48	23.08	0.7472
175	20.50	35.38	24.95	0.8464
200	17.22	35.31	25.72	0.9118
250	13.81	34.97	26.22	1.0176
300	11.76	34.83	26.52	1.1048
400	9.94	34.76	26.79	1.2533
500	8.68	34.70	26.95	1.3823
600	7.38	34.58	27.06	1.4988
700	6.30	34.56	27.18	1.604
800	5.49	34.56	27.29	1.699
900	4.93	34.55	27.35	1.786
1000	4.48	34.55	27.40	1.868
1200	3.82	34.56	27.48	2.019
Station 138: December 26, 1947; 2° 37′ S, 177° 45′ W				
0	28.89	35.65	22.61	
25	28.72	35.63	22.65	0.1309
50	28.87	35.66	22.62	0.2619
75	28.54	35.63	22.71	0.3924
100	27.75	35.61	22.96	0.5191
150	26.95	35.66	23.25	0.7606
175	23.70	35.73	24.30	0.8656
200	17.27	35.67	25.98	0.9381
250	12.44	35.01	26.52	1.0306
300	10.55	34.82	26.73	1.1056
400	9.27	34.72	26.88	1.2386
500	8.38	34.67	26.97	1.3611
600	7.44	34.62	27.08	1.4751
700	6.41	34.59	27.20	1.578
800	5.40	34.57	27.31	1.671
900	4.85	34.56	27.37	1.756
1000	4.45	34.56	27.41	1.837
1200	3.78	34.59	27.51	1.984
1500	3.00	34.61	27.59	2.179
2000	2.29	34.62	27.66	2.469
2500	2.05	34.67	27.73	2.729
3000	1.80	34.70	27.76	2.964
4000	1.40	34.69	27.79	3.404
Station 143: January 3, 1948; 0° 09′ S, 163° 23′ E				
0	29.27	34.44	21.58	
25	29.27	34.44	21.58	0.1559
50	29.21	34.71	21.79	0.3095
75	29.08	34.87	21.96	0.4589
100	29.04	35.11	22.16	0.6041
150	20.60	35.32	24.86	0.8259
200	17.18	35.10	25.57	0.9669
250	15.31	35.11	26.01	1.0811
300	12.45	35.01	26.52	1.1734
400	10.10	34.74	26.75	1.3239
500	8.53	34.64	26.94	1.4554
600	7.09	34.59	27.11	1.570
700	6.24	34.56	27.19	1.673
800	5.56	34.54	27.26	1.769
900	5.15	34.55	27.32	1.859
1000	4.65	34.56	27.38	1.943
1200	3.69	34.62	27.54	2.090
1500	2.88	34.65	27.63	2.273
2000	2.21	34.65	27.69	2.543
2500	1.94	34.67	27.73	2.796
3000	1.71	34.68	27.76	3.031
4000	1.40	34.68	27.78	3.476
Station 150: January 12, 1948;, 2° 09′ N, 146° 52′ E				
0	29.22	34.69	21.78	
25	29.04	34.72	21.86	0.1502
50	29.42	34.85	21.84	0.3000

Meters or decibars	Temp °C	Salinity ‰	σ_t	ΔD dynamic meters
75	29.25	35.11	22.08	0.4474
100	28.28	35.22	22.49	0.5874
150	25.08	35.42	23.65	0.8306
200	18.35	34.76	25.01	1.0144
250	12.14	34.63	26.29	1.1351
300	9.53	34.58	26.73	1.2149
400	8.87	34.66	26.90	1.3469
500	8.17	34.64	26.99	1.4679
600	7.41	34.58	27.05	1.582
700	6.41	34.56	27.17	1.689
800	5.58	34.55	27.26	1.786
900	5.12	34.53	27.32	1.876
1000	4.55	34.51	27.36	1.961
1200	3.72	34.56	27.49	2.115
1500	2.87	34.65	27.63	2.305
2000	2.18	34.56	27.63	2.588
2500	1.82	34.58	27.67	2.865
3000	1.59	34.67	27.76	3.113
4000	1.53	34.71	27.79	3.563

Station 157: January 12, 1948; 2°51′ N, 134°57′ E

0	28.09	34.01	21.65	
25	27.17	34.23	22.12	0.1486
50	26.15	34.66	22.74	0.2846
75	24.70	35.29	23.67	0.4024
100	23.30	35.33	24.11	0.5040
150	20.12	34.73	24.54	0.6870
200	19.38	35.38	25.23	0.8440
250	14.40	34.55	25.77	0.9722
300	11.20	34.69	26.52	1.0700
400	8.57	34.63	26.92	1.2115
500	7.71	34.63	27.05	1.3285
600	7.30	34.59	27.08	1.4385
700	6.68	34.56	27.13	1.546
800	6.02	34.55	27.21	1.648
900	5.27	34.56	27.31	1.741
1000	4.55	34.57	27.40	1.825
1200	3.88	34.60	27.56	1.974
1500	3.08	34.63	27.60	2.169
2000	2.18	34.63	27.68	2.451
2500	1.73	34.67	27.75	2.699
3000	1.59	34.70	27.78	2.921
4000	1.52	34.70	27.78	3.361

Station 162: January 23, 1948; 5°23′ N, 127°48′ E

0	27.83	34.28	21.93	
25	27.62	34.33	22.04	0.1462
50	25.20	34.95	23.27	0.2768
75	22.70	35.04	24.07	0.3834
100	17.50	34.71	25.19	0.4672
150	12.11	34.49	26.20	0.5845
200	10.03	34.48	26.56	0.6695
250	10.18	34.77	26.76	0.7415
300	9.98	34.76	26.78	0.8090
400	8.40	34.61	26.93	0.9370
500	7.52	34.56	27.02	1.0545

Meters or decibars	Temp °C	Salinity ‰	σ_t	ΔD dynamic meters
600	6.67	34.53	27.11	1.1645
700	5.98	34.53	27.20	1.2665
800	5.38	34.53	27.28	1.3605
900	4.95	34.54	27.35	1.4475
1000	4.50	34.56	27.40	1.5290
1200	3.87	34.58	27.49	1.6790
1500	3.07	34.60	27.57	1.880
2000	2.14	34.63	27.69	2.168
2500	1.70	34.67	27.75	2.413
3000	1.56	34.72	27.80	2.630
4000	1.50	34.66	27.76	3.065
5000	1.68	34.68	27.76	3.555
6000	1.82	34.69	27.76	4.090
7000	1.96	34.69	27.75	4.670
8000	2.15	34.69	27.74	5.315

Station 173: February 4, 1948; 7°45′ S, 120°30′ E

0	29.47	32.16	19.80	
25	29.47	32.33	19.93	0.1971
50	28.09	32.48	21.74	0.3772
75	25.16	32.32	22.64	0.5251
100	22.95	32.52	22.84	0.6541
150	17.98	32.67	24.27	0.8739
200	16.00	32.64	24.72	1.0491
250	15.60	32.55	24.74	1.2134
300	11.02	32.52	25.64	1.3559
400	8.92	32.52	25.99	1.582
500	7.23	32.54	26.26	1.778
600	6.64	32.54	26.34	1.958
700	5.97	32.56	26.44	2.131
800	5.39	32.58	26.52	2.295
900	4.95	32.59	26.59	2.452
1000	4.60	32.59	26.62	2.604
1200	4.10	32.60	26.69	2.898
1500	3.61	32.63	26.76	3.321
2000	3.27	32.66	26.82	3.998
2500	3.25	32.65	26.81	4.671
3000	3.28	32.61	26.77	5.368
4000	3.34	32.61	26.77	6.818

Station 183-184: February 24, 1948; 10°19′ S, 109°10′ E

0	29.22	34.39	21.55	
25	29.12	34.45	21.63	0.1556
50	28.62	34.45	21.79	0.3086
75	25.77	34.40	22.67	0.4495
100	23.66	34.50	23.38	0.5718
150	19.95	34.62	24.50	0.7732
200	14.35	34.57	25.80	0.9175
250	12.27	34.55	26.20	1.0215
300	10.63	34.56	26.51	1.1090
400	9.12	34.60	26.80	1.2565
500	8.26	34.62	26.96	1.3835
600	7.28	34.65	27.12	1.4965
700	6.62	34.64	27.21	1.599
800	5.73	34.62	27.31	1.692
900	5.16	34.62	27.38	1.777

Meters or decibars	Temp °C	Salinity ‰	σ_t	ΔD dynamic meters
1000	4.80	34.62	27.42	1.856
1200	4.23	34.63	27.49	2.006
1500	3.48	34.69	27.61	2.207
2000	2.53	34.72	27.72	2.485
2500	1.90	34.73	27.79	2.717
3000	1.49	34.74	27.82	2.919
4000	1.17	34.74	27.85	3.295
5000	1.16	34.73	27.84	3.665
Station 190: February 28, 1948; 11° 28′ S, 102° 14′ E				
0	29.38	33.85	21.09	
25	29.00	33.83	21.21	0.1662
50	26.34	34.51	22.59	0.3148
75	23.69	34.63	23.48	0.4364
100	21.62	34.65	24.08	0.5406
150	16.85	34.60	25.26	0.7071
200	14.15	34.72	25.96	0.8294
250	12.18	34.72	26.35	0.9261
300	10.79	34.71	26.61	1.0076
400	9.52	34.69	26.80	1.1501
500	8.64	34.69	26.95	1.2781
600	7.78	34.69	27.07	1.3946
700	7.03	34.68	27.18	1.501
800	6.22	34.67	27.28	1.597
900	5.47	34.65	27.36	1.684
1000	4.98	34.63	27.41	1.765
1200	4.25	34.66	27.52	1.914
1500	3.49	34.74	27.66	2.106
2000	2.55	34.74	27.75	2.368
2500	1.96	34.74	27.79	2.593
3000	1.57	34.74	27.83	2.796
4000	1.19	34.73	27.84	3.171
Station 196: March 2, 1948; 11° 10′ S, 96° 15′ E				
0	29.41	33.81	21.06	
25	29.31	34.06	21.28	0.1658
50	28.32	34.40	21.86	0.3222
75	25.92	34.52	22.73	0.4616
100	23.46	34.53	23.47	0.5820
150	17.50	34.66	25.15	0.7658
200	13.25	34.57	26.03	0.8888
250	11.51	34.61	26.40	0.9822
300	10.57	34.66	26.60	1.0628
400	9.52	34.76	26.86	1.2028
500	8.55	34.67	26.94	1.3282
600	7.57	34.66	27.08	1.4448
700	6.81	34.66	27.19	1.550
800	6.15	34.66	27.27	1.646
900	5.66	34.65	27.34	1.735
1000	5.32	34.65	27.38	1.819
1200	4.68	34.65	27.47	1.976
1500	3.83	34.68	27.57	2.187
2000	2.50	34.76	27.76	2.467
2500	1.62	34.76	27.83	2.675
3000	1.23	34.69	27.81	2.857
4000	1.12	34.69	27.81	3.227

Meters or decibars	Temp °C	Salinity ‰	σ_t	ΔD dynamic meters
Station 200: March 5, 1948; 11° 01′ S, 88° 26′ E				
0	28.60	34.59	21.91	
25	28.57	34.62	21.94	0.1478
50	28.48	34.66	22.00	0.2946
75	23.94	34.90	23.60	0.4219
100	21.06	34.85	24.39	0.5208
150	16.76	34.74	25.41	0.6760
200	13.23	34.67	26.10	0.7910
250	11.57	34.66	26.42	0.8823
300	10.78	34.69	26.60	0.9623
400	9.68	34.81	26.87	1.1018
500	8.56	34.73	26.99	1.2243
600	7.35	34.70	27.15	1.3348
700	6.46	34.70	27.27	1.4318
800	5.81	34.70	27.36	1.519
900	5.41	34.65	27.37	1.602
1000	5.08	34.64	27.41	1.683
1200	4.42	34.68	27.51	1.833
1500	3.50	34.72	27.64	2.026
2000	2.26	34.74	27.77	2.281
Station 202: March 6, 1948; 8° 26′ S, 88° 16′ E				
0	29.80	34.11	21.15	
25	27.60	34.43	22.12	0.1548
50	24.48	35.12	23.61	0.2804
75	20.16	35.01	24.75	0.3749
100	16.48	34.76	25.46	0.4474
150	13.46	34.80	26.15	0.5594
200	11.81	34.80	26.50	0.6471
250	11.00	34.84	26.67	0.7229
300	10.39	34.88	26.81	0.7919
400	9.42	34.85	26.96	0.9174
500	8.63	34.85	27.08	1.0314
600	7.98	34.85	27.17	1.1369
700	7.37	34.82	27.24	1.2359
800	6.72	34.78	27.30	1.3294
900	6.21	34.76	27.35	1.4184
Station 204: March 7, 1948; 6° 26′ S, 88° 53′ E				
0	29.34	34.51	21.61	
25	27.36	35.09	22.68	0.1424
50	24.77	35.38	23.72	0.2599
75	23.13	35.30	24.13	0.3604
100	20.60	35.04	24.66	0.4499
150	14.99	34.77	25.81	0.5891
200	12.95	34.83	26.29	0.6899
250	11.86	34.90	26.56	0.7734
300	11.08	34.93	26.73	0.8471
400	10.19	34.89	26.86	0.9816
500	9.17	34.84	26.97	1.1061
600	8.31	34.83	27.11	1.2201
700	7.49	34.80	27.21	1.3236
800	6.63	34.75	27.28	1.4191
900	5.92	34.71	27.36	1.508
1000	5.35	34.70	27.41	1.591

Meters or decibars	Temp °C	Salinity ‰	σ_t	ΔD dynamic meters
1200	4.53	34.71	27.52	1.743
1500	3.66	34.77	27.66	1.938

Station 205: March 8, 1948; 4°47′ S, 88°18′ E

0	29.25	34.94	21.95	
25	28.65	34.87	22.10	0.1454
50	27.73	35.35	22.75	0.2789
75	25.42	35.45	23.57	0.3975
100	21.72	35.04	24.35	0.4974
150	14.62	34.87	25.97	0.6154
200	12.18	34.93	26.52	0.7071
250	11.28	34.95	26.71	0.7819
300	10.67	34.94	26.81	0.8501
400	9.67	34.89	26.94	0.9766
500	8.95	34.86	27.03	1.0941
600	8.07	34.83	27.15	1.2031
700	7.46	34.84	27.25	1.3026
800	6.94	34.85	27.33	1.3946
900	6.29	34.81	27.38	1.4811
1000	5.75	34.79	27.44	1.562
1200	4.83	34.79	27.55	1.709
1500	3.80	34.79	27.66	1.901
2000	2.58	34.77	27.77	2.161
2500	1.93	34.76	27.81	2.376
3000	1.53	34.74	27.82	2.574
4000	1.41	34.72	27.81	2.974
5000	1.36	34.73	27.83	3.389

Station 206: March 9, 1948; 2°33′ S, 88°19′ E

0	29.64	35.08	21.93	
25	28.55	35.01	22.23	0.1440
50	28.16	35.06	22.40	0.2826
75	25.56	35.15	23.30	0.4088
100	21.49	35.09	24.45	0.5105
150	13.61	35.04	26.32	0.6425
200	12.40	35.04	26.56	0.7250
250	11.65	35.03	26.70	0.7988
300	11.00	35.00	26.79	0.8675
400	10.00	34.95	26.92	0.9985
500	9.32	34.93	27.02	1.1200
600	8.88	34.96	27.11	1.2320
700	8.20	34.92	27.19	1.3375
800	7.52	34.91	27.28	1.4355
900	7.03	34.92	27.37	1.5255

Station 207: March 10, 1948; 0°00′, 88°18′ E

0	30.11	34.48	21.33	
25	28.95	34.87	22.01	0.1538
50	28.39	35.01	22.29	0.2964
75	25.27	35.57	23.70	0.4191
100	20.92	35.30	24.76	0.5125
150	14.25	35.13	26.25	0.6388
200	12.11	35.09	26.66	0.7202
250	11.79	35.08	26.71	0.7915
300	11.50	35.06	26.75	0.8612
400	10.30	35.00	26.93	0.9918
500	9.88	34.99	26.99	1.1128
600	8.88	34.98	27.14	1.2252
700	8.16	34.99	27.26	1.3258
800	7.80	34.99	27.31	1.4192
900	7.18	34.98	27.39	1.508
1000	6.63	34.97	27.47	1.589
1200	5.64	34.92	27.56	1.736
1500	4.27	34.83	27.65	1.931
2000	2.66	34.78	27.77	2.193
2500	2.06	34.76	27.80	2.411
3000	1.71	34.75	27.81	2.618
4000	1.32	34.73	27.83	3.018

Station 208: March 11, 1948; 1°56′ N, 88°12′ E

0	29.82	34.24	21.23	
25	28.93	34.97	22.08	0.1542
50	28.01	35.00	22.41	0.2946
75	26.73	34.98	22.81	0.4265
100	21.00	35.23	24.69	0.5314
150	14.64	35.09	26.14	0.6621
200	13.02	35.11	26.50	0.7501
250	12.06	35.09	26.67	0.8259
300	11.44	35.07	26.76	0.8961
400	10.64	35.05	26.89	1.0276
500	9.99	35.04	27.00	1.1496
600	9.26	35.04	27.13	1.2621
700	8.57	35.03	27.23	1.3651
800	7.86	35.00	27.31	1.4606
900	7.23	34.98	27.38	1.550

Station 211: March 14, 1948; 4°36′ N, 82°36′ E

0	28.82	33.87	21.30	
25	28.60	34.03	21.49	0.1604
50	28.55	34.93	22.19	0.3104
75	26.11	35.46	23.35	0.4384
100	21.26	34.86	24.34	0.5409
150	14.57	34.94	26.04	0.6821
200	12.62	35.05	26.53	0.7719
250	11.83	35.07	26.69	0.8466
300	11.23	35.07	26.80	0.9154
400	10.58	35.06	26.91	1.0444
500	10.14	35.06	26.98	1.1669
600	9.38	35.06	27.11	1.2814
700	8.72	35.04	27.20	1.3869
800	7.99	34.99	27.28	1.4849
900	7.25	34.97	27.38	1.575
1000	6.71	34.95	27.44	1.658
1200	5.71	34.91	27.54	1.810
1500	4.44	34.85	27.64	2.011
2000	2.84	34.79	27.76	2.283
2500	2.05	34.75	27.80	2.506
3000	1.63	34.73	27.81	2.711
4000	1.37	34.72	27.81	3.121

Meters or decibars	Temp °C	Salinity ‰	σ_t	ΔD dynamic meters
Station 213: March 28, 1948; 4°12′ N, 77°28′ E				
0	29.79	34.90	21.74	
25	29.46	34.92	21.86	0.1509
50	28.38	35.02	22.30	0.2952
75	26.50	35.22	23.06	0.4255
100	23.66	35.15	23.88	0.5371
150	15.58	34.87	25.77	0.6961
200	13.34	35.02	26.36	0.7965
250	12.21	35.05	26.61	0.8771
300	11.40	35.06	26.77	0.9487
400	10.52	35.07	26.93	1.0781
500	9.93	35.05	27.02	1.1977
600	9.30	35.04	27.11	1.3101
700	8.63	35.03	27.21	1.4151
800	7.99	35.02	27.31	1.512
900	7.28	34.95	27.36	1.602
1000	6.56	34.91	27.43	1.686
1200	5.58	34.89	27.54	1.839
1500	4.26	34.87	27.67	2.036
2000	2.73	34.77	27.75	2.303
2500	2.20	34.74	27.77	2.538
3000	1.71	34.73	27.80	2.758
Station 216: March 31, 1948; 0°04′ N, 74°53′ E				
0	29.39	35.15	22.07	
25	29.33	35.13	22.07	0.1444
50	28.87	35.22	22.29	0.2864
75	22.92	35.42	24.28	0.4022
100	22.25	35.35	24.42	0.4929
150	17.96	35.22	25.47	0.6461
200	13.32	35.13	26.45	0.7514
250	12.35	35.12	26.63	0.8294
300	11.55	35.09	26.77	0.9006
400	10.47	35.03	26.91	1.0316
500	9.80	34.98	26.99	1.1536
600	9.20	35.01	27.11	1.2676
700	8.63	35.00	27.19	1.3736
800	8.04	34.99	27.28	1.4721
900	7.44	34.98	27.36	1.563
1000	6.81	34.96	27.43	1.648
1200	5.53	34.94	27.58	1.797
1500	4.09	34.88	27.71	1.980
2000	2.54	34.80	27.80	2.220
2500	2.00	34.74	27.80	2.430
3000	1.63	34.73	27.81	2.635
4000	1.37	34.73	27.84	3.030
Station 220: April 2, 1948; 1°22′ S, 70°28′ E				
0	29.22	35.15	22.12	
25	28.80	35.14	22.26	0.1414
50	28.30	35.18	22.45	0.2791
75	23.39	35.29	24.05	0.3958
100	21.37	35.27	24.62	0.4865
150	18.23	35.22	25.40	0.6365
200	13.61	35.10	26.37	0.7467
250	11.75	35.05	26.70	0.8243
300	11.07	35.03	26.81	0.8925
400	10.37	35.01	26.91	1.0210
500	9.55	35.00	27.05	1.1400
600	9.07	35.02	27.14	1.2495
700	8.58	35.01	27.21	1.3530
800	8.09	35.00	27.29	1.4505
900	7.19	34.98	27.40	1.540
1000	6.62	34.96	27.46	1.621
1200	5.56	34.92	27.56	1.769
1500	4.17	34.86	27.68	1.961
2000	2.54	34.76	27.76	2.221
2500	1.89	34.74	27.80	2.438
3000	1.70	34.74	27.81	2.643
Station 223: April 4, 1948; 1°19′ S, 66°16′ E				
0	30.14	35.08	21.76	
25	28.99	35.12	22.18	0.1466
50	28.34	35.17	22.42	0.2856
75	22.59	35.36	24.34	0.3991
100	20.46	35.24	24.84	0.4839
150	16.68	35.18	25.74	0.6206
200	13.34	35.11	26.43	0.7201
250	11.96	35.05	26.66	0.7979
300	11.14	35.00	26.76	0.8684
400	9.98	34.95	26.94	0.9979
500	9.48	34.98	27.04	1.1154
600	9.28	35.01	27.10	1.2269
700	8.64	35.01	27.20	1.3329
800	7.93	35.01	27.30	1.4304
900	7.27	34.99	27.38	1.520
1000	6.65	34.97	27.46	1.602
1200	5.50	34.90	27.56	1.750
1500	4.02	34.81	27.66	1.943
2000	2.52	34.77	27.78	2.201
2500	1.97	34.75	27.81	2.413
3000	1.72	34.74	27.82	2.616
4000	1.52	34.74	27.83	3.021
Station 225: April 6, 1948; 1°22′ S, 62°38′ E				
0	29.95	35.19	21.90	
25	29.00	35.18	22.22	0.1445
50	26.50	35.34	23.15	0.2742
75	21.30	35.33	24.68	0.3750
100	19.14	35.28	25.22	0.4512
150	16.75	35.21	25.75	0.5788
200	13.72	35.13	26.40	0.6790
250	12.02	35.08	26.71	0.7568
300	11.12	35.03	26.79	0.8255
400	10.57	34.98	26.85	0.9575
500	9.52	34.98	27.03	1.0800
600	9.18	35.01	27.11	1.1920
700	8.51	35.00	27.21	1.2970
800	7.96	35.00	27.30	1.3940
900	7.40	35.00	27.38	1.4835
1000	6.90	34.99	27.45	1.566
1200	5.89	34.94	27.54	1.717

Meters or decibars	Temp °C	Salinity ‰	σ_t	ΔD dynamic meters
1500	4.32	34.84	27.65	1.915
2000	2.71	34.76	27.75	2.185
2500	2.02	34.75	27.80	2.410
3000	1.73	34.74	27.82	2.615
4000	1.53	34.72	27.82	3.025
Station 232: April 17, 1948; 0°01′ S, 54°16′ E				
0	29.45	35.47	22.28	
25	28.33	35.42	22.61	0.1354
50	27.15	35.41	22.99	0.2625
75	25.22	35.38	23.59	0.3781
100	22.60	35.33	24.32	0.4781
150	16.05	35.24	25.94	0.6226
200	13.65	35.15	26.39	0.7184
250	12.43	35.15	26.64	0.7979
300	11.38	35.09	26.79	0.8681
400	10.05	35.00	26.95	0.9956
500	9.69	35.02	27.03	1.1136
600	9.20	35.03	27.12	1.2251
700	8.33	35.04	27.27	1.3261
800	7.87	35.04	27.35	1.4171
900	7.44	35.04	27.40	1.503
1000	6.91	35.03	27.47	1.584
1200	5.71	34.95	27.57	1.731
1500	4.04	34.84	27.68	1.920
2000	2.68	34.80	27.79	2.170
2500	2.04	34.78	27.83	2.375
3000	1.70	34.77	27.85	2.565
4000	1.41	34.74	27.85	2.940